SUPREME COURT, U.S.
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No.

IN THE

Supreme Court of the United States

October Term, 1996

SUSAN M. MAXWELL

Petitioner,

v.

J. BAKER, INC.,

Respondent,

and

PRANGE WAY, INC.,

Defendant.

On Petition for a Writ of Certiorari
To The United States Court of Appeals for the Federal Circuit

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PETITION FOR A WRIT OF CERTIORARI

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QUESTIONS PRESENTED

(1) What effect does the disclosure of alternative equivalent embodiments in a patent's description of the preferred embodiment of the invention have on the Doctrine of Equivalents? Is infringement under the Doctrine limited to those disclosed equivalent embodiments? Is infringement of those embodiments under the Doctrine precluded as a matter of law? Or neither?

(2) Where a patent discloses, as alternatives, insubstantial variations on the preferred embodiment of the invention and the inventor believed and intended those insubstantial variations to be within the literal scope of the claims, but they are later held not to be, are the disclosed insubstantial variations dedicated to the public as a matter of law so as to preclude a finding of infringement under the Doctrine of Equivalents?

PARTIES TO THE PROCEEDING

All of the parties to the proceeding in the district court and in the court of appeals are listed in the caption of the case.

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PETITION FOR A WRIT OF CERTIORARI

Petitioner Susan M. Maxwell hereby petitions this Court to review the judgment of the United States Court of Appeals for the Federal Circuit in this case. A panel of the court, in an opinion authored by one of the dissenting judges in the Federal Circuit's *en banc* decision in *Hilton Davis*, held that as a matter of law the disclosure of alternative embodiments in a patent's description of the preferred embodiment of the invention absolutely bars the application of the Doctrine of Equivalents to those embodiments. The panel held that embodiments disclosed in the patent specification are conclusively deemed dedicated to the public if held to be outside of the literal language of the claims, even if the patent discloses the embodiments as alternatives and the alternative embodiments are found to be substantively equivalent to the embodiments literally claimed. The authoring judge had proposed this new limitation on the Doctrine of Equivalents in his dissenting opinion in *Hilton Davis*. The two dissenting Justices in *Graver Tank* had also proposed this rule. This Court in *Graver Tank* and the Federal Circuit in *Hilton Davis* declined to adopt this rule.

In opposing Ms. Maxwell's request that the Federal Circuit review the panel's decision *en banc*, the Respondent argued that the Federal Circuit should not consider matters that are presently before this Court through the *Hilton Davis* case. The issues presented in *Hilton Davis* do relate to the present case. In *Hilton Davis* this Court has been asked to reconsider the Doctrine of Equivalents generally and to limit the Doctrine to substantive equivalents disclosed in the patent specification. It may accordingly be appropriate to defer ruling on the present Petition for a Writ of Certiorari until this Court has issued its opinion in *Hilton Davis*. *See Murray v. City of New York*, 308 U.S. 528, 310 U.S. 610, 311 U.S. 720 (1940) (granting motions to defer consideration of petition for certiorari); *Keney v. New York*, 388 U.S. 440 (1967) (summarily reversing lower court's decision after holding a petition for certiorari pending the outcome of a similar case before this Court).

OPINIONS BELOW

The opinion of the panel of the court of appeals (Pet. App. A1-23) is reported at *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098 (Fed. Cir. 1996). The order of the court declining a rehearing (Pet. App. A64-66) is not reported. The order of the court on entry of judgment (Pet. App. A67-68) is not reported. The district court's opinion on the denial of Respondent J. Baker's motion for judgment as a matter of law (Pet. App. A24-55) is reported at *Maxwell v. J. Baker, Inc.*, 875 F. Supp. 1371 (D. Minn. 1995), and the district court's opinion on the award of enhanced damages and attorney's fees to Ms. Maxwell (Pet. App. A56-63) is reported at *Maxwell v. J. Baker, Inc.*, 879 F. Supp. 1007 (D. Minn. 1995).

JURISDICTION

The Court of Appeals entered an order on August 28, 1996, declining the request for a rehearing. Pet. App. A64-66. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254.

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

Pertinent Constitutional and statutory provisions are set forth in the Appendix to this Petition. Pet. App. A69-70.

STATEMENT OF THE CASE

1. Background. This case concerns an invention which solved a problem plaguing the discount shoe industry for decades. In self-service discount shoe stores, pairs of shoes must be fastened together. Boxes will not keep them together because customers commonly do not return shoes to boxes after trying them on. If the shoes are not fastened together, they become disorganized and mismatched.

Effectively fastening shoes having no shoestring eyelets was a major problem. For several decades, Respondent J. Baker, Inc. ("J. Baker") and others in the shoe industry used an awl to punch holes in the sides of eyeletless shoes and then strung a plastic filament through the punched holes to connect the shoes. Pet. App. A25. This punched hole system, in creating holes in the

shoe sides, damaged the shoes, degraded their appearance and resulted in significant markdowns and scrap sales.

Petitioner Susan Maxwell invented a way to connect eyeletless shoes without punching holes in the sides of the shoes or otherwise altering the appearance of the shoes. Her invention uses fabric fastening tabs secured inside the shoes. A tab runs along the inside of each shoe so that the tab is not visible and does not cause discomfort when the shoe is worn. *Id.* A plastic filament is threaded through a loop or hole in the tab to fasten the shoes together. The United States Patent and Trademark Office recognized the significance of Ms. Maxwell's invention, granting her U.S. Patent No. 4,624,060 on November 25, 1986 ("the '060 patent").

The patent describes that in a preferred version of Ms. Maxwell's system, the fastening tabs are stitched directly between the inner and outer soles of the shoes. Pet. App. A3. The patent also notes that the tabs can alternatively be stitched into the shoes' inner sides or backs, which are secured between the inner and outer soles of the shoes. The patent states, "Alternatively, the tabs may be stitched into a lining seam of the shoes at the sides or back of the shoes." Pet. App. A11. The claims of the patent include the following limitation on the location of the fastening tabs: "... each of said shoes further having a fastening tab and means for securing said tab between said inner and outer soles ...." Pet. App. A4-5.

As soon as the industry saw Ms. Maxwell's shoe fastening system, the whole industry, including J. Baker, copied her system. Pet. App. A25, A60. J. Baker had used the punched hole system since at least the 1960's until very shortly after seeing Ms. Maxwell's invention. C.A. Jt. App. A1886-87. J. Baker first adopted the 'between-the-soles' version of Ms. Maxwell's invention in which the tabs were secured directly between the inner and outer soles. Pet. App. A5. After the close of evidence at trial, J. Baker admitted that this version infringed Ms. Maxwell's patent. C.A. Jt. App. A3261-62.

Ms. Maxwell notified J. Baker of its infringement of her patent in 1990 and sought a settlement. Pet. App. A25. J. Baker's president and CEO, without having any information as to whether

the patent was valid or infringed, told his in-house counsel and other top executives that he would not pay more than the "nuisance" value of Ms. Maxwell's infringement claim. C.A. Jt. App. A1306-07, A1770-71, A1779-80.

Without consulting counsel or reading the patent in any detail, J. Baker moved the position of the fastening tabs a little bit, changing to a 'top-line' version and a 'counter-pocket' version. Pet. App. A5-6. Instead of sandwiching the tabs directly between the soles, J. Baker stitched the tabs to another part of the shoe that was sandwiched between the soles. In the 'counter-pocket' version the tabs are stitched into a side seam of the shoe. In the 'top-line' version the tabs are stitched into the lining inside and near the top of the shoe. The basic structure was not changed. As with the original version, the tabs were still positioned along the sides of the shoes and were not visible when the shoes were worn.

2. District Court Proceedings. After J. Baker ended settlement negotiations, Ms. Maxwell filed suit in 1990.[1] The case was tried before a jury. J. Baker put up an extensive defense in a trial that took approximately four weeks in 1993. The jury, after hearing all of the evidence and being instructed on both literal infringement and infringement under the Doctrine of Equivalents, found that all versions of the shoe fastening system at issue infringed the '060 patent. Pet. App. A26.

J. Baker did not dispute that it copied the between-the-soles version of Ms. Maxwell's invention. The jury found the patent valid and that J. Baker willfully infringed after 1990 after being notified of the patent. *Id.* Based on the jury's willfulness finding and an evaluation of J. Baker's conduct, the district court awarded Ms. Maxwell attorney fees and treble damages. Pet. App. A56-57.

After trial J. Baker moved for a judgment as a matter of law on various grounds, including an argument that its counter-pocket and top-line versions do not infringe under the Doctrine of Equivalents. Pet. App. A24. J. Baker argued that Ms. Maxwell's patented system has only minor differences from prior patents

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[1] The United States District Court, District of Minnesota, had federal jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338.

from the years 1916, 1919 and 1969, and that these prior patents preclude a finding of infringement under the Doctrine of Equivalents. Pet. App. A38-40. However, none of the systems described in those three patents was shown at trial to have been used on a single pair of shoes by any entity ir the shoe industry. J. Baker did not want to use any of these systems. C.A. Jt. App. A1994-97. The differences between the prior patented systems and the Maxwell system were as big as the difference between no sales and sales exceeding one hundred million pairs. J. Baker also asserted that the prosecution history of the '060 patent barred Ms. Maxwell from asserting that the counter-pocket and top-line versions infringed under the Doctrine of Equivalents. Pet. App. A40-42.

The district court judge denied J. Baker's motion. Pet. App. A24. The judge interpreted the literal meaning of the patent claims as a matter of law. Pet. App. A31-32. Under this claim interpretation, the judge concluded that the top-line and counter-pocket versions did not literally infringe the claims. Pet. App. A34. He determined however that there was substantial evidence to conclude that the counter-pocket and top-line versions infringed under the Doctrine of Equivalents. Pet. App. A36.

That evidence included the admission of a J. Baker vice president that there was no substantial difference between the three versions. C.A. Jt. App. A1663-65, A1669-71, A1935-38. The J. Baker employee who arrived at the modified versions could not describe any substantial difference arising from the different locations of the fastening tabs. C.A. Jt. App. A1563-64, A1602-03. Several other retailers agreed that the tab locations on the modified versions were not substantially different from the location in the between-the-soles version. C.A. Jt. App. A2390, A2445-46, A2338-42. A supplier of J. Baker entered a patent license with Ms. Maxwell covering all three versions. C.A. Jt. App. A2285-87, A3951-52.

The disclosure in the '060 patent of alternative tab locations was only one part of the substantial evidence indicating that the counter-pocket and top-line versions are substantive equivalents of the between-the-soles version. J. Baker presented no evidence that, in arriving at the top-line and counter-pocket versions, it

concluded that Ms. Maxwell had dedicated alternative tab locations to the public by disclosing alternative tab locations in the patent but not literally claiming those other locations. J. Baker admitted that the person who arrived at the modified versions had never read the patent; he came up with the modified versions in five minutes. C.A. Jt. App. A1563-64, A1602-03. The one person at J. Baker who indicated he had read the patent, admitted he had never read the patent's description of alternative tab locations. C.A. Jt. App. A1988-99. J. Baker offered no evidence that it had obtained an opinion of counsel indicating there would be no liability for the modified versions. Pet. App. A37-38, A60.

The judge concluded that neither the prior art nor the patent's prosecution history precluded the finding of infringement under the Doctrine of Equivalents. Pet. App. A38-42. With regard to the prior art, the judge noted that there was considerable evidence indicating that the differences between the prior art systems and Ms. Maxwell's claimed system were great enough to afford Ms. Maxwell's patent a range of equivalents which covers the modified versions without encompassing the prior art. Pet. App. A39-40.

With regard to the prosecution history, J. Baker argued that because Ms. Maxwell stressed the importance of the location of the tabs to differentiate the prior art, she was barred from asserting infringement under the Doctrine of Equivalents. However, the judge recognized that Ms. Maxwell emphasized the placement of the fastening tab inside the shoe, along the side of the shoe upper, and that the tabs in J. Baker's modified versions are also located inside the shoe, along the side of the shoe upper. Pet. App. A40-42.

3. Court of Appeals Proceedings. J. Baker appealed asserting that the district court made numerous errors. A three judge panel of the Federal Circuit reversed the district court judgment insofar as it held that J. Baker's 'counter-pocket' and 'top-line' versions infringed the '060 patent under the Doctrine of Equivalents. Pet. App. A13. The panel did not adopt J. Baker's arguments that the prosecution history or prior art prohibited a finding of infringement under the Doctrine of Equivalents.

Rather, the panel's decision was based solely on the one sentence in the '060 patent mentioning that the tabs can be located at the sides or back of the shoes. Pet. App. A10-13.

The panel held that this sentence, rather than supporting a conclusion that the three versions are equivalent, precluded infringement under the Doctrine of Equivalents as a matter of law. The panel held that subject matter disclosed in a patent specification but held to be outside of the literal language of the claims is as a matter of law dedicated to the public. Pet. App. A13-14. As a result of the reversal of the Doctrine of Equivalents judgment, the panel also vacated that portion of the willfulness finding related to the 'counter-pocket' and 'top-line' versions, and the related award of treble damages and attorney fees. *Id.*

Judge Lourie, the author of the panel's decision, proposed this new limitation on the Doctrine of Equivalents in his dissenting opinion in *Hilton Davis. Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 62 F.3d 1512, 1547 (Fed. Cir. 1995) (en banc), *cert. granted*, 116 S. Ct. 1014 (1996). Judge Lourie stated in his dissent that he would add this limitation to the factors specified by this Court in *Graver Tank Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605 (1950):

> I would also include as *added* factors any behavior of the patentee that impairs the ability of the public to reasonably understand from the claims what is patented. *Among these could be disclosure of an unclaimed embodiment in the patent specification, thereby leading the public to believe that what is unclaimed is disclaimed, when it is that unclaimed embodiment that the patentee later seeks to hold as an infringement under the [Doctrine of Equivalents] DOE.*

Hilton Davis, 62 F.3d at 1547 (Lourie, J., dissenting) (emphasis added). Judge Lourie also argued that the Doctrine of Equivalents should be for the court, not the jury, and that the Doctrine of Equivalents should be an equitable remedy. *Id.* at 1549. The Federal Circuit majority declined to adopt Judge Lourie's views. *Id.* at 1521-22, 1527.

Following the panel's decision, Maxwell requested a rehearing *en banc*. In opposing a rehearing, J. Baker argued, *inter alia*, that the case should not be heard *en banc* because of the pendency of the *Hilton Davis* case before this Court:

> The pendency of Supreme Court review in Hilton Davis, makes this case a particularly inappropriate one for review by this Court in banc.
>
> ....
>
> ... Although [the Federal Circuit] must continue to decide cases, applying the Hilton Davis decision where it applies, judges of [the Federal Circuit] have manifested an understandable reluctance to decide cases on the basis of the issues currently before the Supreme Court for review, where alternative bases are available.

J. Baker's Opposition to Rehearing at 11. The request for rehearing was denied on August 28, 1996. Pet. App. A65-66.

REASONS FOR GRANTING THE PETITION

This Court has long recognized that the Doctrine of Equivalents encourages invention by protecting patentees from appropriations of the patented invention that barely evade the literal language of the patent claims: "The essence of the doctrine is that one may not practice a fraud on a patent." *Graver Tank*, 339 U.S. at 608. The panel of the Federal Circuit below however has created a new, wide-reaching restriction on the Doctrine of Equivalents. Under the panel's new restriction, a patentee is denied protection under the Doctrine if the patentee discloses equivalent alternative forms of the invention which are later held by a court to be outside of the literal language of the patent claims. Infringers are thereby encouraged to scour patents for substantively equivalent forms of the invention disclosed in the patent. If the infringer believes it can convince a court to adopt a claim construction under which the substantive equivalent barely falls outside the literal language of the claim, the infringer will attempt to appropriate the patented invention without liability. Under the panel's new restriction, the patent specification

becomes a road map to insignificant changes by which to escape the patent.

The panel's new restriction on the Doctrine of Equivalents is in conflict with prior decisions of this Court and the Federal Circuit, has no case law support, and is directly contrary to the prior significance accorded similarities between the accused infringer's product and the disclosure in the patent specification. The panel's new restriction was proposed in the dissenting opinions in *Graver Tank*. Both this Court in *Graver Tank* and the Federal Circuit in *Hilton Davis* rejected, implicitly if not expressly, the new restriction. The new restriction is not supported by the case law relied upon by the panel. That case law merely explains that infringement is defined by the claims and subject matter not claimed cannot years later be recovered by having the Patent Office reissue the patent with much broader claims. Infringement under the Doctrine of Equivalents is fully consistent with this case law because, as recognized by this Court in *Graver Tank* and other cases, a substantive equivalent is the same as, and part of, the claimed invention.

The disclosure of the accused infringing product in the patent specification does not necessitate a finding of infringement under the Doctrine. However, holding that the presence of the accused infringing product in the patent specification presents an absolute bar to the Doctrine is contrary to prior controlling decisions in which the similarities between the accused infringing product and the disclosure in the patent specification were found to support a finding of Doctrine of Equivalents infringement. In judging infringement under the Doctrine, this Court has looked to the patent specification to determine the degree of similarity between the accused infringing product and the patented invention. Similarly, the Federal Circuit has on several occasions held that the presence of equivalent structures in the specification is evidence supporting a finding of infringement under the Doctrine. This Court in *Graver Tank* recognized that known interchangeability of the accused infringer's structure for the literally claimed structure is potent evidence of equivalence. Disclosure of the accused infringer's structure as an alternative is evidence of known interchangeability. However, under the

panel's new restriction, known interchangeability applies only when the alternatives are disclosed outside of the patent—not when the public is informed of the known interchangeability in the patent itself.

The panel's new restriction is directly contrary to proposals—as recently made by the Petitioner in *Hilton Davis*—that the Doctrine be limited to, rather than by, the substantive equivalents disclosed in the specification. Such a limitation may make sense; the panel's opposite rule does not. If the panel's rule is to be recognized at all, it should be strictly limited to patents that clearly indicate that the other disclosed embodiments are not considered part of the patented invention and are surrendered to the public. The panel's new restriction should not apply where, as here, the other embodiments are disclosed as substantive equivalents.

The panel premised its new restriction on arguments made against the Doctrine of Equivalents itself: The public's need to be able to rely on the literal language of patent claims; and to discourage patentees from avoiding agency review by presenting narrow claims to the Patent Office. This Court however has balanced these concerns against the need to protect the patentee, and has determined that the promotion of innovation is served by recognizing the Doctrine of Equivalents. The panel's new restriction will, instead of serving its concerns, greatly discourage wide disclosure in patents for fear that other disclosed embodiments will later be deemed outside of the literal language of the claims and hence "dedicated" to the public. This discouragement goes directly against the basic tenant of this Nation's patent system: full disclosure of inventions in exchange for patent rights. Patentees inclined to avoid agency review by presenting narrow claims will not be deterred by the panel's new rule. Rather, such patentees, to the extent they exist, will merely file a narrow patent specification as well, robbing the public of technical knowledge.

I. THE DECISION BY THE FEDERAL CIRCUIT PANEL THAT THE DISCLOSURE OF EQUIVALENT STRUCTURE IN A PATENT SPECIFICATION PRECLUDES APPLICATION OF THE DOCTRINE OF EQUIVALENTS AS A MATTER OF LAW IS IN CONFLICT WITH PRIOR DECISIONS OF THIS COURT AND THE FEDERAL CIRCUIT

A. The Panel's New Limitation on the Doctrine is Contrary to this Court's Decision in *Graver Tank* and the Federal Circuit's Decision in *Hilton Davis*

The panel of the Federal Circuit reversed the jury's finding of infringement solely by creating a new absolute limit on the Doctrine of Equivalents. There have been two absolute limits on the Doctrine: prosecution history estoppel and the prior art. Herbert F. Schwartz, *Patent Law & Practice* 83 (2d ed. 1995). Prosecution history estoppel prohibits a patentee from reobtaining through the Doctrine of Equivalents subject matter that the patentee affirmatively surrendered by way of argument or amendment made to obtain the patent. *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1218-19 (Fed. Cir. 1995); *Texas Instruments, Inc. v. United States Int'l Trade Comm'n*, 988 F.2d 1165, 1174 (Fed. Cir. 1993) ("unmistakable assertions" made to the Patent Office in support of patentability give rise to estoppel); *see also Computing Scale Co. of America v. Automatic Scale Co.*, 204 U.S. 609, 617 (1907). This limit is merely an application of the classic doctrine of estoppel. The prior art prevents the patentee from obtaining, through the Doctrine, a scope of protection that the patentee could not have rightfully obtained before the Patent Office because such an enlarged scope of the invention would have been anticipated or obvious over the prior art, and hence unpatentable. *Wilson Sporting Goods Co. v. David Geoffrey & Assocs.*, 904 F.2d 677, 684 (Fed. Cir.), *cert. denied*, 498 U.S. 992 (1990); *see also, Computing Scale Co.*, 204 U.S. at 616. This, too, is logical because a valid patent can never cover something in the prior art.

The panel of the Federal Circuit has now attempted to create a new limit on the Doctrine of Equivalents. A patent consists of

one or more claims, which define the metes and bounds of the invention, and a specification that describes the invention in detail, including the preferred embodiment. Schwartz, *supra*, at 7-8. The specification consists of a detailed written description and is generally accompanied by one or more drawings. *Id.* The panel has ruled that, as a matter of law, the Doctrine of Equivalents cannot apply to substantively equivalent embodiments that are disclosed in the patent specification but are held to be outside of the literal language of the patent claims. Pet. App. A13. In creating the new rule, the panel reasoned that substantively equivalent embodiments that are disclosed in the patent but later held not to be literally claimed are "dedicated to the public." Pet. App. A11-13. Under the panel's new limit, for the Doctrine to apply to a substantive equivalent, that substantive equivalent must not be disclosed in the patent specification: The panel has created a 'must-not-be-disclosed' limitation on the Doctrine of Equivalents. Applying this new rule to the present case, the panel ruled that the disclosure of alternative locations for the fastening tabs "dedicated to the public" these insubstantial changes "as a matter of law." Pet. App. A13.

The panel's new limit conflicts with this Court's decision in *Graver Tank*. In *Graver Tank* this Court found infringement under the Doctrine of Equivalents where the differences between the literally claimed composition for electric welding and the accused infringing composition were insubstantial. The accused infringing composition was disclosed in the patent specification as an alternative, but was not literally within the claim held to be infringed under the Doctrine of Equivalents.

The dedication to the public theory upon which the panel's new rule rests was advocated in *Graver Tank* by Justices Black and Douglas in separate dissenting opinions. 339 U.S. at 858-61 (Black and Douglas, JJ., dissenting). The dissenting Justices argued that because the equivalent welding composition was disclosed in the patent specification but not literally covered by a valid patent claim, the equivalent composition was dedicated to the public. *Id.* This Court declined to adopt this view. *Id.* at 855-58; *cf. Battin v. Taggert*, 58 U.S. 74, 84 (1854) (In rejecting a dedication-to-the-public rule in the reissue setting, this Court

stated "nothing passes to the public from the specification or claims, within the scope of the patentee's invention. And this may be ascertained by the language he uses.")

The panel of the Federal Circuit attempted to distinguish this Court's *Graver Tank* decision on the basis that in *Graver Tank* the equivalent composition was covered literally by a claim held to be invalid because it was overly broad. The panel reasoned that because the disclosed alternative composition was covered by an invalid claim, the patentee could not be said to have dedicated that embodiment of the invention to the public.[2] Pet. App. A12-13. This Court however did not rely on this distinction in reaching its decision over the two dissenting opinions. *See Graver Tank*, 339 U.S. at 855-58. In fact, this Court did not even mention the presence of the invalid claims in reaching the finding of infringement under the Doctrine of Equivalents. *Id.* Only Justice Black, in his dissenting opinion, mentioned the existence of invalid claims, and he argued that the presence of the broader invalid claims operated against a finding of Doctrine of Equivalents infringement. *Id.* at 860 (Black, J., dissenting).

It would seem that the presence of an overly broad, invalid claim should, if anything, detract from—rather than support—finding infringement under the Doctrine. Under the panel's contrary reasoning, a patentee is rewarded for presenting to the Patent Office an overly broad, invalid claim, and successfully persuading the Patent Office to allow the invalid claim. Furthermore, the public is not free to conclude that it can practice subject matter covered solely by invalid claims, despite the well-established law that there can be no liability for infringement of an invalid claim. 35 U.S.C. § 282. On the other hand, where a patent contains only valid claims, the panel's rule gives the public

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[2] The panel's reasoning suggests that its 'must-not-be-disclosed' rule depends on the intent of the patentee, or on how the patentee's actions would be interpreted by others: Did the patentee intend to surrender technical subject matter, or would others interpret the patentee's actions as such? This reasoning however is contrary to the panel's rule that—as a matter of law—the disclosure of substantive equivalents results in a dedication to the public. With the patentee's intent or the public's perception in issue, issues of fact are instead presented, which would appear to be best resolved by the jury.

a license to practice substantively equivalent embodiments that are disclosed in the patent but are held by the court to be outside of the literal language of the claims. A patentee, as Ms. Maxwell here, is punished for only obtaining valid claims.[3]

The majority of the Federal Circuit has—just as this Court did in *Graver Tank*—also rejected the panel's dedication-to-the-public rule. In *Hilton Davis*, Judge Lourie, like the dissenting Justices in *Graver Tank*, proposed this rule. *Hilton Davis*, 62 F.3d at 1547 (Lourie, J., dissenting). The Federal Circuit majority chose not to adopt the rule. *Id.* at 1517-22 (proposed dedication-to-the-public rule not included with the factors for determining infringement under the Doctrine). The panel's new rule may also be contrary to this Court's pending decision in *Hilton Davis*, where the Petitioner has urged this Court to adopt a directly opposite rule: Limiting the Doctrine of Equivalents to only substantive equivalents disclosed in the patent specification. Brief for Petitioner Warner-Jenkinson Co. at 38-41, *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, On Writ of Certiorari (No. 95-728).

This Court and the Federal Circuit majority have at least implicitly, if not expressly, rejected a 'must-not-be-disclosed' limitation on the Doctrine of Equivalents.[4] A panel of the Federal Circuit is bound by prior decisions of that court, whether by another panel or *en banc*. *Newell Cos., Inc. v. Kenney Mfg. Co.*, 864 F.2d 757, 765 (Fed. Cir. 1988), *cert. denied*, 493 U.S. 814 (1989). And, the panel is of course bound by this Court's decisions. The panel however has adopted a rule contrary to both the precedent of its court and this Court.

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[3] The jury found all the asserted claims of the '060 patent to be valid. Pet. App. A6.

[4] This Court in *Graver Tank* and now in *Hilton Davis* is not squarely faced with the situation presented here, namely, the accused infringing substantive equivalent being disclosed in the patent specification but held not to be within the literal scope of the claims. However, in both *Graver Tank* and in *Hilton Davis* at the Federal Circuit level, dissenting Justices and a dissenting judge proposed the dedication to the public argument and that argument was rejected.

B. The Panel's New Rule Lacks Case Law Support

The panel suggests that its 'must-not-be-disclosed' limitation on the Doctrine of Equivalents has a solid foundation in prior precedent. Pet. App. A11-12. The cases relied upon however do not support the new limitation. The cases cited by the panel state the fundamental principle that the scope of the patent rights are governed by the claims, not the patent specification. *Markman v. Westview Instruments, Inc.*, 116 S. Ct. 1384, 1387-88 (1996); *Marconi Wireless Tel. Co. of America v. United States*, 320 U.S. 1, 23 (1943); *Continental Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405, 419 (1908). In other words, only patent claims are infringed; the patent specification alone cannot be infringed.

In this sense, subject matter that is disclosed in the specification but not claimed is dedicated to the public. *See McClain v. Ortmayer*, 141 U.S. 419, 423-24 (1891). And, as often noted by this Court, such disclosed but unclaimed subject matter cannot, after an undue delay, be claimed by having the Patent Office reissue the patent with broader claims.[5] *See, e.g., Miller v. Brass Co.*, 104 U.S. 350, 350-51 (1882) (delay of 15 years in seeking reissue too long); *Mahn v. Harwood*, 112 U.S. 354, 361-63 (1884) (delay of 4 years too long). The statement that disclosed but unclaimed subject matter is dedicated to the public has not, however, been used to create a bar to the Doctrine of Equivalents. *See* Ernest B. Lipscomb, *Walker on Patents* §7:14 (3d ed. 1984) (Collecting cases on abandonment by disclosure and failure to claim. None of the cases barred the Doctrine of Equivalents based on the disclosure).

The Doctrine of Equivalents is entirely consistent with this Court's prior statements that disclosed but unclaimed subject matter is dedicated to the public. Patent infringement is defined by Section 271 of the Patent Act as the unauthorized making, using, or selling of "any patented invention." 35 U.S.C. § 271(a). Infringement under the Doctrine of Equivalents is consistent with Section 271 because inventions that are substantively equivalent

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[5] Today, under the Patent Act of 1952, any attempt to broaden the claims by having the Patent Office reissue the patent must be made within two years of the issuance of the patent. 35 U.S.C. § 251.

are legally the same as the patented invention. As explained by this Court in *Graver Tank*, the

> theory on which [the Doctrine] is founded is 'if two devices do the same work in substantially the same way, and accomplish substantially the same result, *they are the same*, even though they differ in name, form, or shape.'

339 U.S. at 608 (quoting *Machine Co. v. Murphy*, 97 U.S. 120, 125 (1878) (emphasis added)); *see also Sanitary Refrigerator Co. v. Winters*, 280 U.S. 30, 41-42 (1929) ("There is a substantial identity, constituting infringement, where a device is a copy of the thing described by the patentee, 'either without variation, or with such variations as are consistent with its being in substance the same thing'" (quoting *Burr v. Duryee*, 68 U.S. 531, 573 (1864))); *Machine Co. v. Murphy*, 97 U.S. at 125 ("Authorities concur that the substantial equivalent of a thing, in the sense of the patent law, is the same as the thing itself...."); *accord Hilton Davis*, 62 F.3d at 1526. Substantive equivalents are part of the claimed invention.[6]

With this context as to this Court's statements on dedication to the public, the panel's 'must-not-be-disclosed' limitation is seen to be unsupported by the cases it relied upon. The panel cites this Court's decision in *Miller v. Brass Co.*, 104 U.S. 350 (1881). In *Miller*, the patentee's original patent described and claimed a chimneyless lamp with two domes. Later, this lamp was determined to be a failure. The patentee determined that a single dome with a chimney however would work well. Fifteen years after the original patent issued, the patentee had the Patent Office reissue the patent with substantially broader claims, covering the

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[6] *See, e.g., Markman*, 116 S. Ct. at 1388 ("[The patent claim] functions to forbid not only exact copies of an invention, but products that go to 'the heart of the invention but avoid the literal language of the claim by making a non-critical change....'"); *Winans v. Denmead*, 56 U.S. 330, 343 (1854) ("[T]he patentee ... is ... deemed to claim every form in which his invention may be copied, unless he manifest an intention to disclaim some of those forms."); *cf. Goodyear Dental Vulcanite Co. v. Davis*, 102 U.S. 222, 230 (1880) ("It may be conceded the patentee is protected against equivalents for any part of his invention. He would be, whether he had claimed them or not.").

single dome, chimneyless version. *Miller*, 104 U.S. at 350-351. The original patent did not claim or describe this single dome version. This Court held the reissued patent invalid because after such a long time, the patentee could not make such substantial changes to the scope of the claims through the reissue process. *Id.* at 352. In this sense, the Court stated that there is "a dedication to the public of that which is not claimed." *Id.* This Court said nothing about the patentee's protection against substantive equivalents under the Doctrine of Equivalents when such equivalents are disclosed in the patentee's specification.

The panel's reliance on *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558 (Fed. Cir. 1991) and *Environmental Instruments, Inc. v. Sutron Corp.*, 877 F.2d 1561 (Fed. Cir. 1989) is similarly misplaced. *Unique Concepts* repeats the truism that "subject matter disclosed but not claimed in a patent application is dedicated to the public." 939 F.2d at 1562-63. This statement is, consistent with precedent, made in the context that infringement is determined by the claims, not the disclosure in the specification. *Id.* at 1563 The accused infringing product was disclosed in the specification, but was held to be outside of the literal scope of the claims. There was therefore no literal infringement. *Id.* at 1562. The district court's finding of no infringement under the Doctrine of Equivalents was also upheld. *Id.* at 1563-64. However, the "dedicated to the public" statement was not the basis for the decision under the Doctrine of Equivalents. *Id.* Rather, there was no Doctrine of Equivalents infringement because the claimed and accused products were found to be substantially different.[7] *Id.*

In *Environmental Instruments, Inc. v. Sutron Corp.*, the Federal Circuit again stated that infringement is established based on what is claimed, not on what is disclosed in the specification. 877 F.2d at 1564. In response to the patentee's argument that

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[7] This factual determination was supported, in part, by the specification and file history of the patent-in-suit, which indicated that the allegedly equivalent alternative was substantially different because the accused infringing device was more difficult for a "do-it-yourselfer" to use. *Unique Concepts*, 939 F.2d at 1563. Thus, the particular language used in the specification to describe the alternative structure may, in some circumstances, indicate that the differences are substantial.

there should be literal infringement because the accused product is so close to what is disclosed in the patent specification, the court stated "[t]he disclosure of a patent is in the public domain save as the claims forbid." *Id.* Noting that only the claims can be infringed, the court concluded that there was no literal infringement. *Id.* The court did not even refer to its "public domain" statement when also concluding that there was no infringement under the Doctrine of Equivalents. Rather, the court found that the asserted scope of equivalents was precluded by prosecution history estoppel. *Id.* at 1564-66.

Here, Ms. Maxwell did not rely on the patent specification to show that the counter-pocket and top-line versions of her system should be found to infringe regardless of what the patent claims say. Instead, she proved that these versions were substantively equivalent to the claims. Cases which require a focus on the claims rather than the specification, such as those cited above, provide no basis to preclude a finding of infringement here. A finding that one has effectively abandoned the full scope of a right as important as a patent should not have such a precarious foundation.

C. Precedent Dictates that Similarities Between the Disclosure in the Patent Specification and the Accused Infringing Product Actually Support a Finding of Infringement under the Doctrine of Equivalents

The panel's 'must-not-be-disclosed' rule is contrary to decisions of this Court and the Federal Circuit which have relied on the disclosure in the specification to support a finding of infringement under the Doctrine of Equivalents. The patented invention is measured by the claims, not the specification. However, the patent specification, by providing more detail as to the structure and operation of the claimed invention, can be relevant to whether the claimed and accused infringing products are equivalents. For example, this Court has relied on the fact that "[the accused infringing product] is in the main an exact reproduction of the structure disclosed in the ... patent" in concluding that there was Doctrine of Equivalents infringement. *Sanitary Refrigerator Co. v. Winters*, 280 U.S. 30, 40 (1929).

Similarly, in *Nat'l Cash Register Co. v. Boston Cash Indicator & Recorder Co.*, 156 U.S. 502 (1895), this Court looked to the patent specification to determine whether the patented cash register and the defendant's cash register operated in substantially the same way. The Court compared the operation of the defendant's cash register to that disclosed in the patent specification and concluded that the operation of the two cash registers was the same, except that the defendant's cash register employed a "sliding bar," whereas the patented cash register employed a "pivoted wing." *Cash Register Co.*, 156 U.S. at 503-07, 516-17. Because the operation of the defendant's cash register was the same as that disclosed in the patent specification, and a sliding bar was a well-known equivalent for a pivoted wing, this Court determined that there was infringement under the Doctrine of Equivalents:

> The operation of the two devices is the same .... In a word, there were two known methods of accomplishing the same result—a pivoted wing and a sliding bar.... [W]e think the charge of infringement is made out.

Id. at 517.

The content of the patent specification can also evidence known interchangeability and therefore support a finding of infringement under the Doctrine of Equivalents. As this Court recognized in *Graver Tank*, 36 U.S. at 609, "[a]n important factor" to be considered in the Doctrine of Equivalents "is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was." The Federal Circuit has also recognized the importance of evidence of known interchangeability. *Hilton Davis*, 62 F.3d at 1519 ("The known interchangeability of the accused and claimed elements is potent evidence that one of ordinary skill in the relevant art would have considered the change insubstantial."); *Corning Glass Works v. Sumitomo Electric. U.S.A., Inc.*, 868 F.2d 1251, 1261 (Fed. Cir. 1989). The presence of alternatives in the patent specification can

indicate the known interchangeability of those alternatives for the literally claimed structure.

The panel's new rule however limits "known interchangeability" to situations where the inventor did not know of the interchangeability or concealed his knowledge of the interchangeability. Such a limitation is unsound. Indeed, none of the cases discussing "known interchangeability" limit this factor to situations where only persons other than the inventor disclosed the known interchangeability. The panel's decision in the present case may create the anomalous rule that "known interchangeability" favors equivalents only for the ignorant or concealing inventor who does not disclose the interchangeability, and precludes equivalents for the learned, forthright inventor who knows of the interchangeability and discloses it to the public.

Prior to the panel's decision, the Federal Circuit has on several occasions relied on the disclosure of equivalent structure in the specification as evidence supporting a finding of infringement under the Doctrine of Equivalents. For example, in *Miles Lab. v. Shandon, Inc.*, 997 F.2d 870 (Fed. Cir. 1993), *cert. denied*, 510 U.S. 1100 (1994), the patent at issue was directed to an apparatus for tissue processing. The claims required that various components be contained in a single cabinet, but the accused device employed three separate "modules." *Miles Lab.*, 997 F.2d at 876. In affirming the District Court's finding of infringement under the Doctrine of Equivalents, the Federal Circuit noted: "Indeed, the specification states that 'the controls could be mounted in a separate cabinet.'" *Id.* at 877. Rather than concluding, as the panel did here, that the disclosure of equivalent embodiments in the specification as a matter of law constitutes a "dedication to the public," the court in *Miles Lab.* recognized that such disclosure actually supports a finding of infringement under the Doctrine.

Uniroyal, Inc. v. Rudkin-Wiley Corp., 939 F.2d 1540 (Fed. Cir. 1991), involved an air deflector used on trucks. The claims of the patent required that the "height ratio" of the deflector be substantially 0.7. The specification, however, taught that the height ratio could be between 0.5 and 0.9. *Uniroyal*, 939 F.2d at 1544. The court affirmed a finding of infringement by a device

which did not literally meet the "substantially 0.7" limitation, noting:

> [T]he patent specification teaches that a device otherwise satisfying the claim limitations works in the same manner, but not as efficiently, if it is of different height or positioned differently.

Id. Again, the disclosure of equivalent structure in the specification was found to favor a finding of equivalents, not to constitute a "dedication to the public."

The holding, in these decisions by this Court and the Federal Circuit, that the disclosure of equivalents in the specification supports a finding of infringement under the Doctrine of Equivalents implicitly rejects the panel's new limitation. Furthermore, in *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1220 (Fed. Cir. 1995), the accused infringer argued that the Doctrine of Equivalents is applicable only when the equivalent structure is disclosed in the specification—just as the Petitioner in *Hilton Davis* recently argued before this Court. The Federal Circuit rejected this argument, noting that "[i]t is not controlling whether the inventor foresaw and described this potential equivalent at the time the patent application was filed." *Id.* This holding also implicitly rejects the panel's new limitation which conclusively precludes the Doctrine when the inventor foresees and describes the equivalent in the patent.

II. THE PANEL'S MAJOR NEW RESTRICTION ON THE DOCTRINE OF EQUIVALENTS WILL UPSET THE BALANCE PREVIOUSLY STRUCK BY THIS COURT AND WARRANTS IMMEDIATE SCRUTINY

A. The Doctrine Could Be Limited to Disclosed Substantive Equivalents, but Should Not Be Precluded from Covering those Equivalents

Others, including the Petitioner in the *Hilton Davis* case presently before this Court, have urged that the Doctrine of Equivalents be limited to substantive equivalents disclosed as

such in the patent specification.[8] Brief for Petitioner Warner-Jenkinson Co. at 38-41, *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, On Writ of Certiorari (No. 95-728). While Ms. Maxwell does not necessarily advocate such a limitation, such a limitation does have some merit and the reasons given in support of such a limitation expose the unsoundness of the directly contrary rule created by the panel in the present case:[9]

One, if the patent discloses the substantive equivalents and the accused infringer was aware of the patent at the time of the development of one of these equivalents, at least the inference can be made that the accused infringer developed their product by "imitation" rather than "independent research." As noted by this Court in *Graver Tank*, such evidence strongly supports a finding of Doctrine of Equivalents infringement. 339 U.S. at 612. Two, if the patent discloses the substantive equivalents, it is the plaintiff patentee, not the defendant, who has made the advance in knowledge, and therefore rewards the proper person. Three, if the accused infringer's product is disclosed in the patent, that product, by being disclosed in the patent specification, meets the basic bargain of the patent statute: patent protection in exchange for disclosure. *See Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150-51 (1989). Four, if the Doctrine is limited to embodiments disclosed in the patent, the proof problems in the Doctrine would be greatly limited. The question would boil down to whether the other disclosed embodiments are substantively equivalent to those literally claimed. There would be no need to consider other later developed embodiments.

Limiting the Doctrine of Equivalents to disclosed alternatives would serve each of these policies. However, if the Doctrine is

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[8] Under this proposition, the disclosure of the alternatives would not give rise to infringement under the Doctrine of Equivalents. Rather, the patentee would have to first show that the accused infringing embodiment is a substantive equivalent. The mere disclosure of the embodiment in the specification would not itself conclusively establish that the embodiment is substantively equivalent.

[9] These arguments can be found in the Brief for Petitioner Warner-Jenkinson Co. at 38-41, *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, On Writ of Certiorari (No. 95-728).

precluded from applying to disclosed substantive equivalents, each of these policies would be disserved.

B. Any Dedication-to-the-Public Rule Should Be Limited to Patents that Clearly Indicate a Surrendering of the Other Disclosed Embodiments

The panel's decision was premised on the belief that:

> A person of ordinary skill in the shoe industry, reading the specification and prosecution history, and interpreting the claims, would conclude that Maxwell, by failing to claim the alternate shoe attachment systems in which the tabs were attached to the inside shoe lining, dedicated the use of such systems to the public.[10]

Pet. App. A13. This cannot be reconciled with the patent record. The sole suggestion in the patent of other tab locations is a single sentence. Pet. App. A11. That one sentence, rather than indicating a dedication to the public, describes the other locations for the tab as part of the patented invention: "Alternatively, the tabs may be stitched into a lining seam of the shoes at the sides or back of the shoes." *Id.* The prosecution history also does not indicate that the alternative tab locations were being dedicated to the public. J. Baker raised a prosecution history estoppel argument, but the district court judge and Federal Circuit panel declined to adopt it.[11]

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[10] As discussed in note 2 *supra*, here again the reasoning behind the panel's new rule indicates that questions of fact for the jury are presented: Would persons of ordinary skill conclude that the patentee dedicated subject matter to the pubic? The panel however presents its rule as an absolute conclusion of law.

[11] If the panel believed prosecution history prohibited the application of the Doctrine of Equivalents to cover the 'counter-pocket' and 'top-line' versions, it is hard to reconcile why the panel did not find a prosecution history estoppel, given the wide acceptance of that limitation. Rather, the panel apparently concluded that the only way to reverse the finding of infringement under the Doctrine of Equivalents was by establishing new law—the 'must-not-be-disclosed' restriction.

The panel's *sua sponte* factual finding that the public would conclude that the other tab locations were dedicated to the public is unsupported. J. Baker offered no evidence whatsoever at trial indicating that it, or anyone else, concluded that Ms. Maxwell had dedicated the other tab locations to the public. Additionally, J. Baker offered no evidence that it had received an opinion of counsel, let alone one concluding that there was a dedication to the public. J. Baker had not perceived a public dedication. To the contrary, the person at J. Baker who reviewed the patent testified that he never read the patent's description of alternative tab locations. A different person at J. Baker came up with the modified versions, and that person had never even seen the patent.

A dedication-to-the-public rule may make sense where the patent's description of other embodiments clearly indicates that those other embodiments are not intended to be part of the patented invention. For example, if the patent specification describes those other embodiments as prior art, if the specification attributes those other embodiments to someone else, or if the specification distinguishes the other embodiments from the invention, it may be fairly said that the public is led to believe that that subject matter has been dedicated to the public. No such situation exists here.

Limiting any dedication-to-the-public rule in this manner is consistent with the well-established doctrine of prosecution history estoppel. Prosecution history estoppel is limited to amendments and "unmistakable assertions" made by the patentee before the Patent Office to secure the patent. *See, e.g., Texas Instruments*, 988 F.2d at 1174; *Pall Corp.*, 66 F.3d at 1218-19. In contrast, the panel has applied a far looser standard here to find an abandonment as a matter of law. A dedication to the public should not be found where, as here, the patent record indicates an intent to include—rather than exclude—the equivalents as part of the patented invention.

C. The Panel's Decision Discourages Full Disclosure in Patents and Public Dissemination of Inventions, Thereby Decidedly Outweighing the Panel's Tenuous Policy Arguments

The panel based its new rule on two policy concerns: (1) the need for the public to be able to rely on the claims as defining the scope of patent protection; and (2) the need to discourage unscrupulous patent applicants from intentionally presenting narrow claims for examination by the Patent Office, and then later seeking protection for broader, unexamined subject matter under the Doctrine of Equivalents. Pet. App. A11-13. These are the same arguments made against the Doctrine of Equivalents itself. *See, e.g.,* Brief for Petitioner Warner-Jenkinson Co. at 13-31, *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, On Writ of Certiorari (No. 95-728). They carry no extra weight here over any other Doctrine of Equivalent's case. This Court has concluded that, despite these concerns, the balance tips in the favor of recognizing the Doctrine.

The Doctrine of Equivalents represents the proper balance between the panel's concerns and the need to protect the inventor from injustice arising out of the uncertainties of claim language, claim construction, and attempts by others to evade the literal language of the claims. The United States Constitution authorizes Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to ... Inventors the exclusive Right to their ... Discoveries." U.S. Const. Art. I, § 8, cl. 8. As between the panel's concerns and protecting the patentee, the latter, because it is constitutionally mandated, is more important and accordingly should be given more weight. In *Graver Tank* this Court recognized that the Doctrine of Equivalents encourages technological innovation by protecting the patentee from appropriations of the invention that barely avoid the literal language of the claims. 339 U.S. at 608. This court determined that where the differences between the claimed and accused device are merely insubstantial ones which neither add nor subtract anything of substance to the device, the proper balance is struck by recognizing infringement under the Doctrine. *Id.* at 610.

The balance does not change when the allegedly equivalent structure is disclosed in the patent specification. If the structure is indeed equivalent, i.e., an insubstantial change adding nothing of significance, then the public is not mislead by its disclosure in the specification. To the contrary, the disclosure in the patent specification of other embodiments as equivalent alternatives, as in the present case, actually warns the public that the other embodiments are considered part of the patented invention. Thus, the disclosure of substantive equivalents in the patent specification actually tips the scale further in favor of the Doctrine of Equivalents.

With regard to the second concern, an argument can always be made, and has been made, against the Doctrine of Equivalents that patent applicants will intentionally present narrow claims for examination and then later seek broader protection under the Doctrine of Equivalents. The argument however ignores the realities of our patent system. The hurdles which must be overcome to establish infringement under the Doctrine of Equivalents—including establishing substantive equivalents, the absence of prosecution history estoppel, and no encroachment on the prior art—are substantially greater than those for literal infringement. The panel provides no factual support for the presumption that a patentee would rather fight over the Doctrine of Equivalents in court than fight for the broadest claims before the Patent Office.[12]

To the contrary, the plaintiff patentee in an infringement action must prove that the expanded scope of patent protection sought under the Doctrine of Equivalents is patentable over the prior art. *Wilson Sporting Goods*, 904 F.2d at 685; *see also Computing*

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[12] Furthermore, there is no basis to conclude that a claim that literally does not include a substantive equivalent is more easily passed through the Patent Office than a claim that literally encompasses the substantive equivalent. If the substantive equivalent is in the prior art, a more narrowly drafted claim should also be unpatentable as being obvious in view of the prior art substantive equivalent. As stated by the late Judge Nies in her *Hilton Davis* dissent, "assuming the [Patent Office] had done it's job, as we must, known equivalents of a claim element were considered in determining patentability of an issued claim." *Hilton Davis*, 62 F.3d at 1573 (Nies, J., dissenting).

Scale, 204 U.S. at 617. The patentee that chooses this route faces an opposing team of lawyers, as opposed to an *ex parte* examination before the Patent Office. The patentee also loses the presumption of validity that would apply if such a claim had been obtained before the Patent Office. 35 U.S.C. § 282.

The panel's reasoning is also flawed because it appears to assume that, without its new rule, the patentee can ensure Doctrine of Equivalents infringement by other embodiments by merely disclosing those other embodiments in the patent specification. That is not the case. Whether or not the accused infringing embodiment is disclosed in the specification, the patentee must establish that the accused embodiment is substantively equivalent to the literally claimed embodiment. The disclosure of the accused infringing embodiment in the specification is not dispositive, and may even support the conclusion that the embodiments are not equivalent. *See Malta v. Schulmerich Carillons, Inc.*, 952 F.2d 1320, 1327 (Fed. Cir. 1991), *cert. denied*, 504 U.S. 974 (1992) (relying on disclosure of asserted equivalent structure in the specification, not as establishing a dedication to the public, but as evidence that the claimed and accused structure operate in substantially different ways).

The Doctrine of Equivalents strikes the proper balance because it serves to "benefit the inventor's genius and not the scrivener's talents ...." *Autogiro Co. of America v. United States*, 384 F.2d 391, 399 (Ct. Cl. 1967). Limiting patent rights to the literal language of the claims "would place the inventor at the mercy of verbalism and would be subordinating substance to form." *Graver Tank*, 339 U.S. at 607. This is particularly true given the complexity and uncertainty of claim construction. The literal scope of a claim is not known at the time the application is filed. Rather, the literal scope of the claim is determined by a court as a matter of law in subsequent litigation. *Markman*, 116 S. Ct. at 1387. Thus, the patentee may intend and believe the claims to be broad enough to literally cover equivalent structure disclosed in the specification. However, a judge may later reach a different conclusion. That is the case here, where Ms. Maxwell presented evidence and argument, both below and on appeal, to show that

the claims of the '060 patent were literally infringed. Pet. App. A31-32. After the jury trial however, the district court judge construed the claims such that the 'top-line' and 'counter-pocket' versions did not literally infringe. Pet. App. A34. This Court recently recognized the complexity and difficulty presented by claim construction. *Markman,* 116 S. Ct. at 1395. Inventors like Ms. Maxwell should not be punished by that difficulty and associated uncertainty by being precluded protection under the Doctrine of Equivalents.

The panel's 'must-not-be-disclosed' limitation will not resolve its worry that patentees may be motivated to present narrow claims before the Patent Office and then later argue for broader protection through the Doctrine of Equivalents in an infringement suit. Rather, any patentees so inclined will continue this practice but will now further narrow the patent: The patentee will also narrow the disclosure in the specification, carefully excluding substantively equivalent structures.

Such behavior, which the panel's decision will encourage, is contrary to the goals of the patent system. Our patent system is intended to advance the useful arts through the disclosure of new and useful products and processes. U.S. Const. Art. I, § 8, cl. 8; 35 U.S.C. § 112. That purpose is best served when inventors are encouraged to provide full and complete disclosures of their inventions. *See Bonito Boats*, 489 U.S. at 150-51. Such full disclosure logically includes not just the preferred mode of the inventor's invention, but also substantively equivalent structures which can be used as alternatives for the elements of the preferred mode. The panel's 'must-not-be-disclosed' rule encourages patentees to omit substantive equivalents from the specification for fear that the substantive equivalents later will be held to be outside of the literal scope of the claims, and, under the panel's new rule, therefore precluded as a matter of law from the Doctrine of Equivalents.

The behavior encouraged by the panel's new rule is not limited in effect to patentees inclined to present narrow claims to the Patent Office. Rather, because of the inherent impreciseness of claim language and the uncertainty as to how that claim language will later be construed by a court, even forthright patentees who

intend to present the broadest formulation of the invention to the Patent Office for examination will hesitate to disclose known equivalents in the specification to avoid the risk of an unintended dedication to the public. The most cautious patentee will include in patent applications a detailed description of the most preferred mode and nothing else. Anything further only increases the risk of a dedication to the public under the panel's new.

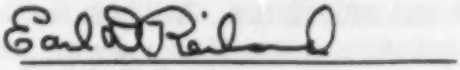
Before the panel's new limitation on the Doctrine of Equivalents, there was little or no disadvantage to disclosing substantive alternatives in the specification. The public has benefited from the wider patent disclosures that resulted prior to the panel's new limitation. Now thousands of patentees who provided a wide disclosure, face the very real risk that their rights are in practice worthless because of the panel's new rule. Unscrupulous imitators around the world may now be scouring patent specifications looking for minor variations that might be considered as being outside the literal scope of the claims, which they can now freely appropriate based on an alleged "dedication to the public."

These results are contrary to the policies of obtaining full and complete disclosure of inventions, and encouraging the act of invention, so as to best advance the useful arts.

CONCLUSION

The Petition for a Writ of Certiorari should be granted.

Respectfully submitted,



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UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

95-1292, -1293, -1355

SUSAN M. MAXWELL,

Plaintiff-Appellee,

v.

J. BAKER, INC.,

Defendant-Appellant,

and

PRANGE WAY, INC.,

Defendant.

Earl D. Reiland, Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A., of Minneapolis, Minnesota, argued for plaintiff-appellee. With him on the brief were Daniel W. McDonald, and Alan G. Gormer.

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Appealed from: United States District Court for the District of Minnesota (Minneapolis)

Judge Doty

A2

United States Court of Appeals for the Federal Circuit

95-1292, -1293, -1355

SUSAN M. MAXWELL,

Plaintiff-Appellee,

v.

J. BAKER, INC.,

Defendant-Appellant,

and

PRANGE WAY, INC.,

Defendant.

DECIDED: June 11, 1996

Before LOURIE, Circuit Judge, SKELTON, Senior Circuit Judge, and SCHALL, Circuit Judge.

LOURIE, Circuit Judge.

J. Baker, Inc. appeals from the final judgment of the United States District Court for the District of Minnesota in which the court denied J. Baker's motion for judgment as a matter of law after a jury verdict of infringement of claims 1, 2, and 3 of U.S. Patent 4,624,060, owned by the inventor, Susan M. Maxwell. Maxwell v. J. Baker, Inc., 875 F. Supp. 1371 (D. Minn. 1995).

Because the court erred when it denied J. Baker's motion for judgment as a matter of law on the issue of infringement, but did not err otherwise, we affirm-in-part, reverse-in-part, vacate-in-part, and remand.

BACKGROUND

In retail shoe stores, pairs of shoes must be kept together to prevent them from becoming disorganized and mismatched. Typically, manufacturers connect pairs of shoes using plastic filaments threaded through each shoe's eyelets. However, some shoes do not have eyelets and cannot be connected in this manner. Thus, manufacturers have resorted to other methods of keeping the shoes together such as making a hole in the side of each shoe and threading a filament through these holes. This method creates problems for retailers and manufacturers because the shoes are damaged by the process.

Maxwell, an employee at a Target retail store, recognized this problem and invented a system for connecting shoes that do not have eyelets. She secured tabs along the inside of each shoe and connected the shoes with a filament threaded through a loop or hole in each tab. By securing the tabs inside the shoe, she preserved the integrity and appearance of the shoes.

Maxwell filed a patent application entitled "System for Attaching Mated Pairs of Shoes Together," which issued as the '060 patent on November 25, 1986. Figure 2 of the patent illustrates the preferred embodiment of the invention and is shown below.

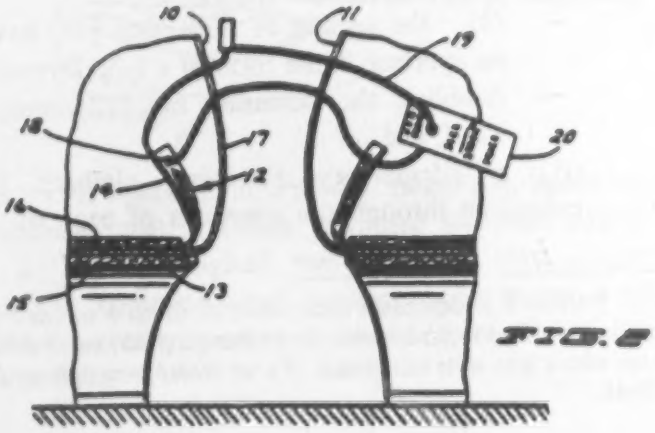


FIG. 2

Claim 1, with reference numbers to figure 2 added, is representative of the claims at issue:[1/]

1. A system for attaching together mated pairs of shoes, which comprises in combination:

(A) a pair of shoes, each of which has an inner sole [16] and an outer sole [15], each shoe also having a shoe upper with an inside surface [17] and a top edge, each of said shoes further having a fastening tab [12] and means for securing said tab between said inner and outer soles,

(1) said fastening tab [12] being an integral sheet with two parts,

(2) the first of said parts [13] comprising one end of the elongated tab [12] extending horizontally between the inside surfaces of the outer sole [15] and inner sole [16] of the shoe and firmly secured thereto with said securing means,

(3) the second of said parts [14] comprising the opposite end of the elongated tab [12] extending from one edge of the inner sole [16] and vertically upward along but spaced from the inside surface of the shoe upper [17] and extending so that said opposite end remains beneath the top edge of said shoe upper,

(4) the second of said parts [14] having an aperture in the form of a loop formed by doubling the fastening tab [12] over on itself, and

(B) a filamentary fastening element [19] extending through the apertures of each of said

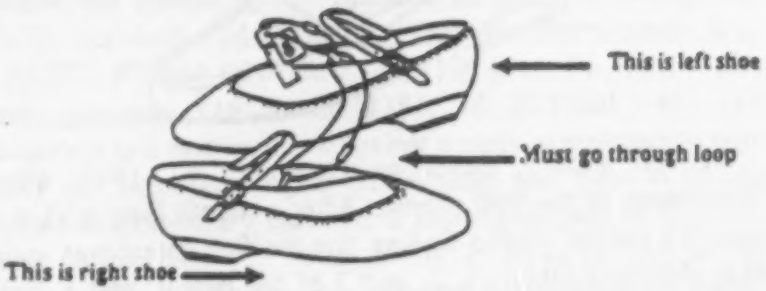
---

[1/] Claim 2 is dependent upon claim 1. Claim 3 contains essentially the same limitations as to the location of the fastening tab, but describes the use of the tab with a hole at its end instead of a tab folded over to form a loop. Col. 4, ll. 10-44.

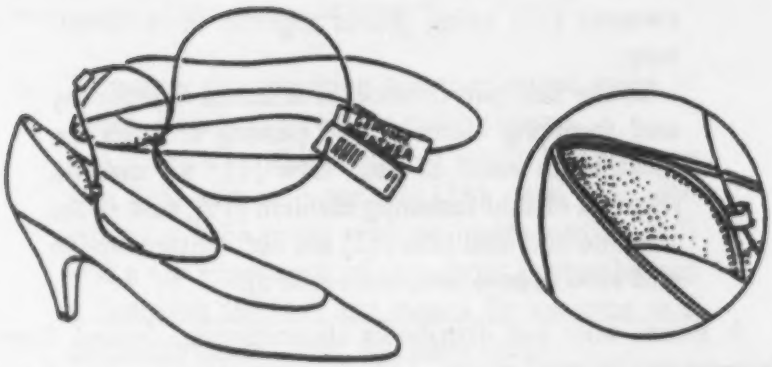
> fastening tabs [12], the ends of the filamentary element [19] being joined together in a closed loop;
>
> whereby said pair of shoes is attached together by said fastening element [19] passing through the aperture in each of said tabs [12] so that on removal of said fastening element [19], said shoes separate and said tabs [12] are not visible outside said shoe uppers [emphasis added].

J. Baker sells and distributes shoes through leased footwear departments in retail stores. Under a typical leasing arrangement, a retail store provides J. Baker with the exclusive right to operate a shoe department within the store. J. Baker selects the merchandise, stocks the shelves at the stores, and serves the customers. In exchange, the retail store receives a portion of the sales receipts.

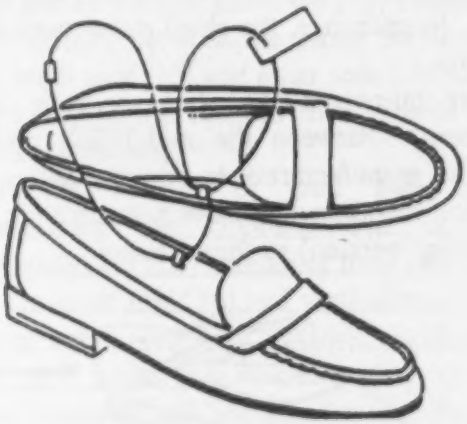
J. Baker purchases the shoes it sells from independent manufacturers. Between the mid-1980's and 1990, J. Baker instructed its manufacturers to connect shoes together for sale using a fabric loop inserted under a shoe's sock lining (the "under the sock lining" version) as shown below.



In June 1990, Maxwell informed J. Baker's in-house counsel that she believed that J. Baker infringed the '060 patent. In response, J. Baker designed two alternate shoe connection systems. In the "counter pocket" version, shown below, a tab was stitched into the counter pocket of the shoe between the sole and the top of the shoe.



In the "top line" version, shown below, a tab was stitched into the top lining seam of the shoe.



Maxwell sued J. Baker on December 12, 1990, alleging infringement of the '060 patent. After a month long trial, a jury returned a special verdict finding that the '060 patent was valid; J. Baker infringed claims 1, 2, and 3 of the patent; and J. Baker's infringement was willful after June 1990, when it received actual notice of the '060 patent. The jury also determined that Maxwell complied with the marking requirements of 35 U.S.C. § 287(a) as of November 1987. Thus, it awarded $1.5 million in damages based on its determination that a reasonable royalty for use of Maxwell's patent was $.05 per pair of shoes and J. Baker sold 31 million infringing pairs of shoes. In addition, the jury awarded

Maxwell an additional $1.5 million based on its determination that Maxwell was damaged in excess of the $.05 royalty.

J. Baker filed a motion for judgment as a matter of law and a motion for a new trial arguing, inter alia, that J. Baker did not infringe either literally or by equivalence, the marking date fixed by the jury was not supported by substantial evidence, the amount of damages awarded in excess of the reasonable royalty award was not supported by any evidence, and the '060 patent was invalid based on prior inventorship. The court denied J. Baker's motions. Maxwell, 875 F. Supp. at 1375. In addition, it awarded prejudgment interest, trebled damages for shoe sales after June 1990 based on the jury's willful infringement finding, directed an award of attorney fees, and entered an injunction preventing J. Baker from making, using or selling any shoes connected with a system covered by the patent. Maxwell v. J. Baker, Inc., 879 F. Supp. 1007 (D. Minn. 1995) (awarding prejudgment interest, enhanced damages, and attorney fees); Maxwell v. J. Baker, Inc., 879 F. Supp. 1012 (D. Minn. 1995) (entering an injunction against J. Baker). J. Baker appeals.

DISCUSSION

When a party moves for JMOL in a case tried to a jury, we review the district court's decision de novo by reapplying the JMOL standard. Markman v. Westview Instruments, Inc., 52 F.3d 967, 975, 34 USPQ2d 1321, 1326 (Fed. Cir. 1995), aff'd on other grounds, 116 S. Ct. 1384, 38 USPQ2d 1461 (1996). Judgment as a matter of law against a party is appropriate when "a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue . . ." Fed. R. Civ. P. 50(a)(1). We review the legal standards that the jury applied in reaching its verdict to determine whether they were correct as a matter of law. Markman, 52 F.3d at 975, 34 USPQ2d at 1326. We review the jury's resolution of all factual disputes for substantial evidence. Id.

A. Infringement

An infringement analysis requires two separate steps. First, the court must construe the claims asserted to be infringed as a

matter of law in order to establish their meaning and scope. Markman v. Westview Instruments, Inc., 116 S. Ct. 1384, 1393, 38 USPQ2d 1461, 1471 (1996). Second, the claims as construed are compared to the allegedly infringing device. Id. To literally infringe, the accused device must contain every limitation of the asserted claim. Laitram Corp. v. Rexnord, Inc., 939 F.2d 1533, 1535, 19 USPQ2d 1367, 1369 (Fed. Cir. 1991). Even if the accused device does not literally infringe, it may infringe under the doctrine of equivalents if the differences between the claimed invention and the accused device are "insubstantial." Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512, 1517, 35 USPQ2d 1641, 1644-45 (Fed. Cir. 1995) (in banc) (per curiam), cert. granted, 116 S. Ct. 1014 (1996).

1. Claim Construction

Both parties agree that the key claim limitation for purposes of this appeal concerns Claim 1's requirement that a "fastening tab" extend "horizontally between the inside surfaces of the outer sole and inner sole of the shoe." Col. 3, ll. 34-36. The district court construed the claim language to require that the fastening tab extend from between the inner and outer shoe soles. Moreover, the court construed the claim to require that the fastening tab be a separate piece from any other shoe part, including the counter pocket, the shoe lining, and the sock lining. Maxwell, 875 F. Supp. at 1379-80. On appeal, J. Baker does not challenge the court's claim construction. However, Maxwell asserts that its claims are broader than the district court's claim construction. In particular, she argues that the term "fastening tab" should be construed to cover a loop connected to a counter pocket lining, or other interior lining structure, which extends from between the shoe's soles.

We disagree with Maxwell's attempt to expand the claims. Claim 1 requires the tab to extend "from one edge of the inner sole and vertically upward along but spaced from the inside surface of the shoe upper." Claim 3 requires the tab to extend "upwardly along the inside surface of the shoe upper." Thus, both claims require a separate tab that extends along the shoe upper. Moreover, as Figure 2 of the patent illustrates, one of ordinary skill in the shoe industry would recognize that a shoe upper

includes the outside portion of the shoe and the inside lining of the shoe. See also CUCCINELLI, MARIBETH, THE ART AND SCIENCE OF FOOTWEAR MANUFACTURING 64 (Norman V. Germany ed., 1974) (defining a shoe "upper" as "all of the upper parts of a shoe stitched together and ready for lasting and bottoming. It includes both the outside and lining of the shoe.") Thus, to accept Maxwell's claim interpretation that the inside lining of the shoe is part of the tab, we would have to ignore the claim limitations that require the tab to be separate from and extend along the shoe upper, which includes the inner shoe lining. See Texas Instruments Inc. v. United States Int'l Trade Comm'n, 988 F.2d 1165, 1171, 26 USPQ2d 1018, 1023 (Fed. Cir. 1993) ("[T]o construe the claims in the manner suggested by TI would read an express limitation out of the claims. This we will not do . . . ."); see also Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1563, 19 USPQ2d 1500, 1504 (Fed. Cir. 1991) ("Our interpretation gives full effect to the recitation of two distinct elements in the claimed structure: linear border pieces and right angle corner border pieces.").

Neither the patent specification nor the prosecution history indicates that the claims should be interpreted differently. To the contrary, the specification makes clear that the claims, as properly construed, require the fastening tab to be separate from the inside shoe lining. The specification indicates that "the [fastening] tab extends around the edge of the inner sole of the shoe and vertically upwardly along the inside surface of the upper body of the shoe, but spaced therefrom." Col. 1, ll. 62-66. In addition, the specification suggests that the fastening tab, as an alternative to placing it between the inner and outer soles, may be "stitched into a lining seam of the shoes at the sides or back of the shoes [emphasis added]." Col. 2, 11. 42-43. Accordingly, Maxwell must have contemplated that the tab be separate from the shoe's lining seam in order for the tab to be stitched into the lining. Thus, the court properly construed the claims to require the fastening tab to be a separate piece from the counter pocket lining or other inside shoe lining.

2. J. Baker's "Under the Sock Lining" Version

J. Baker argues that, despite the district court's proper claim construction, substantial evidence does not support the jury's verdict that the shoes sold by J. Baker before 1990 infringed. In particular, J. Baker asserts that it ordered shoes from manufacturers requesting that the fastening tab be located "under the sock," not between the inner and outer soles. Because the claims require that the tab be secured between the inner and outer soles, J. Baker asserts that it did not infringe.

We disagree. Maxwell presented exhibits and testimony that, despite J. Baker's instructions to place the fastening tabs "under the sock," J. Baker's manufacturers supplied shoes with the tabs placed between the inner and outer soles. J. Baker even admits that some shoes were supplied by its manufacturers with the tabs located between the soles, but responds that it is "implausible" that all the shoes were supplied with the tabs between the soles. However, it did not come forward with any evidence that its manufacturers complied with its instructions or that any shoes were supplied with the tabs "under the sock lining." Thus, based on the evidence that Maxwell presented, a reasonable jury could have found that all the shoes with the "under the sock" system were supplied with the tab between the soles and therefore infringed.

3. J. Baker's "Counter Pocket" and "Top Line" Versions

Based on its proper claim construction that the claimed "fastening tab" does not include a shoe's inner lining, the district court held that no reasonable jury could have found literal infringement in J. Baker's use of the "counter pocket" and "top line" fastening systems. Maxwell, 875 F. Supp. at 1380. In particular, the court found that these versions did not secure the fastening tabs between the inner and outer soles of the shoes as required by the claims. However, the court denied J. Baker's JMOL motion on the issue of infringement because it determined that substantial evidence supported the jury's finding of infringement under the doctrine of equivalents. Id. at 1380-84.

J. Baker argues that the district court erred in sustaining the jury's verdict, asserting that Maxwell dedicated to the public the use of a fastening tab attached to a shoe lining by disclosing that alternate system in the specification, but failing to claim it. In

particular, J. Baker relies on Maxwell's disclosure in the specification that "[a]lternatively, the tabs may be stitched into a lining seam of the shoes at the sides or back of the shoes," col. 2, ll. 41-43, asserting that this language describes the accused shoes. Maxwell counters, relying on the Supreme Court's decision in Graver Tank & Manufacturing Co. v. Linde Air Products Co., 339 U.S. 605, 85 USPQ 328 (1950), that the inclusion of the alternative description in the specification actually supports a finding of equivalence. We agree with J. Baker.

In Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 19 USPQ2d 1500 (Fed. Cir. 1991), we reiterated the well-established rule that "subject matter disclosed but not claimed in a patent application is dedicated to the public." 939 F.2d at 1562-63, 19 USPQ2d at 1504. See also Miller v. Bridgeport Brass Co., 104 U.S. 350, 352 (1881) ("[T]he claim of a specific device or combination, and an omission to claim other devices or combinations apparent on the face of the patent, are, in law, a dedication to the public of that which is not claimed."). We have frequently applied this rule to prohibit a finding of literal infringement when an accused infringer practices disclosed but unclaimed subject matter. E.g., Environmental Instruments, Inc. v. Sutron Corp., 877 F.2d 1561, 1564, 11 USPQ2d 1132, 1134 (Fed. Cir. 1989). This rule, however, applies equally to prevent a finding of infringement under the doctrine of equivalents. A patentee may not narrowly claim his invention and then, in the course of an infringement suit, argue that the doctrine of equivalents should permit a finding of infringement because the specification discloses the equivalents. Such a result would merely encourage a patent applicant to present a broad disclosure in the specification of the application and file narrow claims, avoiding examination of broader claims that the applicant could have filed consistent with the specification. See Genentech, Inc. v. Wellcome Found. Ltd., 29 F.3d 1555, 1564, 31 USPQ2d 1161, 1167 (Fed. Cir. 1994) ("An applicant should not be able deliberately to narrow the scope of examination to avoid during prosecution scrutiny by the PTO of subject matter . . . and then, obtain in court, either literally or under the doctrine of equivalents, a scope of protection which encompasses that subject

matter."); International Visual Corp. v. Crown Metal Mfg. Co., 991 F.2d 768, 775, 26 USPQ2d 1588, 1593 (Fed. Cir. 1993) (doctrine of equivalents should not extend to disclosed, but unexamined, subject matter) (Lourie, J., concurring). This is clearly contrary to 35 U.S.C. § 112, which requires that a patent applicant "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112 (1994). It is also contrary to our system of patent examination, in which a patent is granted following careful examination of that which an applicant claims as her invention. Thus, we agree with J. Baker that subject matter disclosed in the specification, but not claimed, is dedicated to the public.[2/]

The Supreme Court's decision in Graver Tank is not to the contrary. In Graver Tank, the Court affirmed a district court's finding that the defendant infringed composition claims 18, 20, 22, and 23 of U.S. Patent 2,043,960, which claimed a composition for electric welding containing "a major portion of alkaline earth metal silicate." The accused material contained manganese silicate, which is not an alkaline earth metal silicate. The specification, however, disclosed that manganese silicate, among other silicates, could also be used in the composition, but that the inventors preferred to use alkaline earth metal silicates. The court affirmed a finding of infringement under the doctrine of equivalents based on the district court's finding that "for all practical purposes, manganese silicate can be efficiently and effectually substituted for [alkaline earth metal silicates] as the major constituent of the welding composition." Graver Tank, 339 U.S. at 612, 85 USPQ at 331.

Despite its reliance on the patentee's disclosure in the specification of the use of manganese in the welding composition to support a finding of infringement under the doctrine of equivalents, the Court in Graver Tank was not confronted with the same factual situation as we are here. As issued, the '960 patent

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2/ Of course, within two years from the grant of the original patent, a patentee may seek reissuance of the patent and attempt to enlarge the scope of the claims to include the disclosed but previously unclaimed subject matter. 35 U.S.C. § 251 (1994).

included broad composition claims drawn to a welding material comprising "metallic silicate and calcium fluoride." In other words, contrary to the situation here, the patentee in Graver Tank claimed the use of manganese silicate. However, the Court affirmed the district court's decision in which it held these broad claims to be invalid on the ground that many metal silicates embraced by the claims, but not disclosed in the specification, were inoperative. Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 336 U.S. 271, 276-77, 80 USPQ 451, 453 (1949). Thus, by filing claims in the patent application that encompassed a welding composition containing metal silicates, including manganese silicates as disclosed in the specification, the patentee could not be said to have dedicated such an embodiment of the invention to the public, even if the broad claims encompassing the embodiment were later held invalid.

Here, Maxwell limited her claims to fastening tabs attached between the inner and outer soles. She disclosed in the specification, without claiming them, alternatives in which the fastening tabs could be "stitched into the lining seam of the shoes." Col. 2, l. 42. By failing to claim these alternatives, the Patent and Trademark Office was deprived of the opportunity to consider whether these alternatives were patentable.[1/] A person of ordinary skill in the shoe industry, reading the specification and prosecution history, and interpreting the claims, would conclude that Maxwell, by failing to claim the alternate shoe attachment systems in which the tabs were attached to the inside shoe lining, dedicated the use of such systems to the public. As a matter of law, J. Baker could not infringe by using an alternate shoe attachment system that Maxwell dedicated to the public. Therefore, we reverse the district court's decision denying J. Baker's JMOL motion that its "counter pocket" and "top line" systems did not infringe under the doctrine of equivalents. In addition, we vacate the court's award of enhanced damages and attorney fees based on the jury's verdict that J. Baker willfully

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1/ Thus, this situation is different from that where prosecution history estoppel might apply, when broader claims were submitted and the claims were narrowed during prosecution.

infringed after it began using the "counter pocket" and "top line" systems. We further vacate the court's injunction to the extent it is contrary to our holding regarding infringement.

B. Damages

In light of its infringement finding, the jury awarded Maxwell over $1.5 million in damages based on its determination that a "reasonable royalty" for use of Maxwell's patent was $.05 per pair of shoes and J. Baker sold 31 million infringing pairs of shoes. In addition, the jury awarded Maxwell another $1.5 million based on its determination that Maxwell was damaged in excess of the $.05 royalty. The court upheld the jury's verdict after J. Baker's JMOL motion, finding that the award was supported by substantial evidence. Maxwell, 875 F. Supp. at 1388.

J. Baker challenges the methodology the court instructed the jury to follow in calculating the amount of damages. It further argues that no evidence supports an award of damages in excess of the $.05 royalty rate. Thus, J. Baker asserts that the additional $1.5 million in damages must be vacated. We review the court's methodology used in calculating damages for an abuse of discretion. Unisplay, S.A. v. American Electronic Sign Co., 69 F.3d 512, 517 n.8, 36 USPQ2d 1540, 1544 n.8 (Fed. Cir. 1995). We review the jury's determination of the amount of damages, an issue of fact, for substantial evidence. SmithKline Diagnostics, Inc. v. Helena Lab. Corp., 926 F.2d 1161, 1164 n.2, 17 USPQ2d 1922, 1925 n.2 (Fed. Cir. 1991).

When infringement has been shown, a patentee is entitled to "damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer." 35 U.S.C. § 284 (1994). The district court here instructed the jury concerning the calculation of damages as follows:

> If you should find that Maxwell has sustained damages, the minimum amount of monetary damages that you may award is a reasonable royalty. A reasonable royalty is the amount of money which the owner of a patent would accept who is desirous of licensing another to use her patent in return for a royalty, but is not forced by

financial need or other compulsion to do so, and the amount which a person would be willing to pay as a royalty who is desirous of obtaining a license to use the invention, but who is not compelled to do so.

. . . .

In determining a reasonable royalty, you are to imagine that a hypothetical negotiation took place between J. Baker and Maxwell at or about the time that J. Baker first infringed the patent. You must assume that Maxwell was willing to grant a license and that J. Baker was willing to accept one. . . .

In determining the result of such a hypothetical negotiation, you may consider facts and events that occurred after the alleged infringement began even though they would not have been known to the parties at the time of the hypothetical negotiation. . . .

You may also consider evidence bearing on the actual commercial consequences of the infringement, including the amount of money Maxwell may have lost due to the infringement. . . .

Maxwell contends that she was forced to offer licenses based on a diminished royalty because she felt that there was a widespread and open disregard of her patent rights.

J. Baker, on the other hand, contends that the patent had not been disregarded and that Maxwell's offers were consistent with her existing marketing program.

If you should find that the disregard of the patent forced Maxwell to seek a decreased royalty, you may determine that the rate offered

by Maxwell was not a true measure of a reasonable royalty.

The court then asked the jury to answer the following special interrogatories as part of its verdict:

8. If you find that J. Baker infringed the Maxwell patent, what is a reasonable royalty rate per pair of shoes for use of the Maxwell patent?

9. What is the total number of pairs of shoes that J. Baker sold or used using the invention of the Maxwell patent during the period in which Maxwell is entitled to recover?

10. If you find that J. Baker infringed the Maxwell patent, was Maxwell damaged in excess of the amount of a reasonable royalty as a result of the infringement? If your answer to Question No. 10 is "Yes," then answer Question No. 11.

11. What amount of money will compensate Maxwell for additional damages, if any, she sustained as a result of the infringement?

Thus, the court asked the jury to determine both a "reasonable royalty" and additional damages necessary to compensate for the infringement.

The court did not abuse its discretion in presenting the damages issue to the jury in this fashion. The objective of the reasonable royalty calculation is to determine the amount necessary to adequately compensate for an infringement. See Stickle v. Heublein, Inc., 716 F.2d 1550, 1562, 219 USPQ2d 377, 386 (Fed. Cir. 1983) ("[T]he amount of the royalty should be that amount which adequately compensates for the infringement."); see also Fromson v. Western Litho Plate and Supply Co., 853 F.2d 1568, 1574, 7 USPQ2d 1606, 1612 (Fed. Cir. 1988) ("The [reasonable royalty] determination remains one of damages to the injured party."). The determination is based in part upon a "hypothetical negotiation," which "requires the court to envision

the terms of a licensing agreement reached as the result of a supposed meeting between the patentee and the infringer at the time infringement began." Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1554, 35 USPQ2d 1065, 1077 (Fed. Cir. 1995) (in banc), cert. denied, 116 S. Ct. 184. This "hypothetical negotiation" is often referred to as a willing licensor and licensee negotiation. However, as we previously stated in Rite-Hite, this is an "absurd" characterization of the determination when the parties were previously unable to come to an agreement, i.e., were not "willing," as in this case. Id. at 1554 n.13, 35 USPQ2d at 1076 n.13. Therefore, the use of a willing licensee-willing licensor model for determining damages "risks creation of the perception that blatant, blind appropriation of inventions patented by individual, nonmanufacturing inventors is the profitable, can't-lose course." Fromson, 853 F.2d at 1575, 7 USPQ2d at 1612. To avoid such a result, the fact finder may consider additional factors to assist in the determination of adequate compensation for the infringement. These factors include royalties received by the patentee for the licensing of the patent in suit, opinion testimony of qualified experts, the patentee's relationship with the infringer, and other factors that might warrant higher damages. See Georgia-Pacific Corp. v. United States Plywood Corp., 318 F. Supp. 1116, 1120, 166 USPQ 235, 238 (S.D.N.Y. 1970). The fact that an infringer had to be ordered by a court to pay damages, rather than agreeing to a reasonable royalty, is also relevant. Under such an analysis, the district court would normally instruct the jury to return a damage award, based on a willing licensee-willing licensor negotiation and these other factors, in an amount sufficient to adequately compensate the patentee for the infringement. See Fromson, 853 F.2d at 1574-76, 7 USPQ2d at 1612-14.

In this case, the jury instruction tracked the requirements for a traditional reasonable royalty analysis. However, the special verdicts asked the jury to answer two separate inquiries, the amount of a "reasonable royalty" and the additional damages required to compensate for infringement. We do not find this to be an abuse of discretion. As the district court stated:

> the jury could have plausibly understood the instructions as directing them to award as a reasonable royalty the minimum figure that two hypothetical, willing parties would agree upon. To adequately compensate Maxwell for her actual damages, however, the jury awarded additional compensatory damages to effectively increase the royalty as applied to the infringer here, J. Baker.

875 F. Supp. at 1388. Thus, the court properly instructed the jury to award a reasonable royalty and then asked a separate inquiry. See Stickle, 716 F.2d at 1563, 219 USPQ at 387 ("[T]rial court may award an amount of damages greater than a reasonable royalty so that the award is 'adequate to compensate for the infringement.' . . . Such an increase . . . may be stated . . . as a reasonable royalty for an infringer . . . or as an increase in the reasonable royalty determined by the court . . . ."). The first inquiry required the jury to determine the royalty that two willing parties would negotiate; the second inquiry required the jury to determine the increase in the damages required to adequately compensate the patentee based on other relevant factors. In sum, the district court did not abuse its discretion in employing the methodology it did in instructing the jury as to the determination of Maxwell's damages.[4]

Moreover, substantial evidence supports the damages determined by the jury based on this methodology. The total compensatory award, based on sales of 31 million pairs of shoes (using the "under the sock" as well as the "counter pocket" and "top line" attachment systems), results in an effective royalty rate just below $.10 per pair of shoes. This rate is supported by

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[4] Our decision is not inconsistent with this court's recent decision in Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 38 USPQ2d 1288 (Fed. Cir. 1996). In Mahurkar, we held that a district court may not increase a reasonable royalty by a "kicker" based on litigation or other expenses. 79 F.3d at 1580-81, 38 USPQ2d at 1293. We further held that any enhanced damages and attorney fees must be awarded under sections 284 and 285 of the Patent Act. Id. Here, the court did not award enhanced damages or fees. Instead, pursuant to instructions from the court, the jury awarded damages adequate to compensate Maxwell for the infringement, as called for by the statute.

evidence that Maxwell entered into agreements with other licensees at a royalty rate of $.10 per pair of shoes. See Atlantic Thermoplastics Co. v. Faytex Corp., 5 F.3d 1477, 1482, 28 USPQ2d 1343, 1347 (Fed. Cir. 1993) (relying on royalty offered by the patentee to a third party to support a reasonable royalty determination). In addition, Maxwell presented expert testimony that $.10 per pair of shoes was a reasonable royalty rate. See 35 U.S.C. § 284 ("The court may receive expert testimony as an aid to the determination . . . of what royalty would be reasonable under the circumstances."). Thus, the jury did not arbitrarily increase the award of damages. Instead, the jury's verdict reflects the actual damages sustained by Maxwell from sales of shoes incorporating the "under the sock," "counter pocket," and "top line" attachment systems; it was not less than a reasonable royalty and is supported by substantial evidence.

In view of the fact that we have reversed the finding of infringement under the doctrine of equivalents with respect to Baker's "counter pocket" and "top line" attachment systems, however, we must vacate the award of damages and remand the case so that the trial court can determine the amount of damages for infringement resulting solely from the sale of J. Baker's "under the sock" system, in a manner consistent with this opinion.

C. Marking

J. Baker also argues that the court erred by denying its JMOL motion on the issue of patent marking under 35 U.S.C. § 287(a). J. Baker asserts that, as a matter of law, no damages may be awarded for infringement occurring before it had actual notice of the alleged infringement in June 1990, and that substantial evidence does not support the jury's verdict that Maxwell complied with the marking statute as of November 1987. In support, J. Baker relies on evidence that at least 5% of the shoes sold by Maxwell's licensee, Target, were not properly marked because Target failed to instruct some of its manufacturers to mark the patented systems.

In response, Maxwell argues that substantial evidence supports the jury's verdict. In particular, Maxwell asserts that she was diligent in enforcing Target's duty to mark, and Target successfully marked 95% of the shoes sold with the attachment

system. Thus, she maintains that the court did not err when it denied J. Baker's JMOL motion on the issue of marking. We agree.

Section 287(a) of the Patent Act provides:

> Patentees, and persons making or selling any patented article for or under them, may give notice to the public that the same is patented, either by fixing thereon the word "patent" or the abbreviation "pat.", together with the number of the patent . . . . In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice.

35 U.S.C. 287(a) (1994). Thus, the statute defines that "[a patentee] is entitled to damages from the time when it either began marking its product in compliance with section 287(a)[, constructive notice,] or when it actually notified [the accused infringer] of its infringement, whichever was earlier." American Medical Sys., Inc. v. Medical Eng'g Corp., 6 F.3d 1523, 1537, 28 USPQ2d 1321, 1331 (Fed. Cir. 1993), cert. denied, 114 S. Ct. 1647 (1994). We have construed section 287(a) to require that "once marking has begun, it must be substantially consistent and continuous in order for the party to avail itself of the constructive notice provisions of the statute." Id. As the patentee, Maxwell had the burden of pleading and proving at trial that she complied with the statutory requirements. See Motorola, Inc. v. United States, 729 F.2d 765, 770, 221 USPQ 297, 300-01 (Fed. Cir. 1984); see also Dunlap v. Schofield, 152 U.S. 244, 248 (1894) ("[T]he duty of alleging, and the burden of proving, either [actual notice or constructive notice] is upon the [patentee]."). Compliance with section 287(a) is a question of fact, and we review the court's denial of JMOL on the jury's resolution of the issue for substantial evidence.

A patentee who makes, uses, or sells its own invention is obligated to comply with the marking provisions to obtain the benefit of constructive notice. See American Medical, 6 F.3d at 1538, 28 USPQ2d at 1332 ("Full compliance was not achieved until [the patentee] consistently marked substantially all of its patented products, and it was no longer distributing unmarked products."). The marking provisions also apply to "persons making or selling any patented article for or under [the patentees]." 35 U.S.C. § 287(a). Thus, licensees, such as Target, and other authorized parties, such as Target's manufacturers, must also comply. See Amsted Indus., Inc. v. Buckeye Steel Castings Co., 24 F.3d 178, 185, 30 USPQ2d 1462, 1467-68 (section 287(a) applies to express and implied licensees). However, with third parties unrelated to the patentee, it is often more difficult for a patentee to ensure compliance with the marking provisions. A "rule of reason" approach is justified in such a case and substantial compliance may be found to satisfy the statute. Therefore, when third parties are involved, the number of shoes sold without proper marking is not conclusive of the issue whether the patentee's marking was "substantially consistent and continuous." When the failure to mark is caused by someone other than the patentee, the court may consider whether the patentee made reasonable efforts to ensure compliance with the marking requirements. The rule of reason is consistent with the purpose of the constructive notice provision--to encourage patentees to mark their products in order to provide notice to the public of the existence of the patent and to prevent innocent infringement. American Medical, 6 F.3d at 1538, 28 USPQ2d at 1332.

Here, Maxwell, the patentee, made extensive and continuous efforts to ensure compliance by Target. There is evidence that Target, as licensee of Maxwell's patent, marked at least 95% of the shoes sold using the patented system. Because Target sold millions of pairs of shoes using the patented system, it is true that a numerically large number of shoes were sold without proper marking. Despite this, however, the evidence supports the jury's finding that Maxwell complied with the statute. Before the patent issued, Target agreed to mark "Patent Pending" on all pairs of

shoes using Maxwell's shoe attachment system. After the patent issued on November 26, 1986, Maxwell notified Target to mark the patent number on all shoes using the patented system, as required by their license agreement. Initially, Target made no effort to change the marking from "Patent Pending" to recite the patent number. In response, Maxwell notified Target's manufacturers of the need to properly mark. Subsequently, Target agreed to properly mark shoes using the patented system by November 1987. Thereafter, on several occasions when Maxwell learned of Target's failure to properly mark shoes using the patented system after November 1987, she notified Target of the errors and requested that the shoes be properly marked in the future. Maxwell also presented evidence that, in response to her urging, Target used its best efforts to correct its failure to mark by instructing its manufacturers to properly mark in the future.

Thus, we find that substantial evidence supports the jury's determination that Maxwell complied with the marking statute as of November 1987. Most pairs of shoes using the patented attachment system were properly marked. Any deficiency in the marking was not due to Maxwell or any failure on her part to ensure compliance by her licensees; she diligently attempted to comply with the statutory marking requirements. Therefore, we affirm the district court's denial of J. Baker's JMOL motion on the issue of marking.

D. J. Baker's Other Arguments

We have carefully considered J. Baker's remaining arguments, including its argument that the court erred by refusing to submit to the jury its argument based on Maxwell's failure to join all inventors in the patent application. We do not find these arguments to be persuasive.

CONCLUSION

We affirm the finding that J. Baker's "under the sock lining" version of its shoes infringed the claims of the '060 patent. However, we reverse the court's denial of J. Baker's JMOL motion on the issue of infringement by the "counter pocket" and "top line" versions because Maxwell dedicated to the public the use of the alleged infringing devices by disclosing, but not claiming,

such systems. Accordingly, we vacate the court's willful infringement finding, the award of actual and enhanced damages and attorney fees, and the court's injunction to the extent that it contradicts our holding. However, we approve the methodology the court used to calculate damages. We affirm the jury's conclusions that the '060 patent was not proved invalid and that Maxwell complied with the marking requirements of 35 U.S.C. § 287(a) as of November 1987. On remand, the court must redetermine the damages in a manner consistent with this opinion.

COSTS

The parties shall bear their respective costs.

AFFIRMED-IN-PART, REVERSED-IN-PART, VACATED-IN-PART, and REMANDED

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA
FOURTH DIVISION

Susan M. Maxwell, Civil No. 4-90-941

Plaintiff,

v. **ORDER**

J. Baker, Inc., and
Prange Way, Inc.,

Defendants.

Earl D. Reiland, Esq., Daniel W. McDonald, Esq., Alan G. Gorman, Esq., and Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A., 3100 Norwest Center, 90 South Seventh Street, Minneapolis, MN 55402, counsel for Susan Maxwell.

James J. Foster, Esq., Philip G. Koenig, Esq., Douglas R. Wolf, Esq. and Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210, and Bruce H. Little, Popham, Haik, Schnobrich & Kaufman, Ltd., 3300 Piper Jaffray Tower, 222 South Ninth Street, Minneapolis, MN 55402, counsel for J. Baker, Inc.

This matter is before the court on the motion of defendant J. Baker, Inc. ("J. Baker") for judgment as a matter of law pursuant to Rule 50(b) of the Federal Rules of Civil Procedure. Based on a review of the file, record and proceedings herein, and for the reasons stated below, the court denies defendant's motion.

BACKGROUND

This case concerns various systems used to connect shoes which do not have laceholes, buckles or other apertures through which a filament can be threaded to join the shoes. Before 1983, discount stores connected shoes without apertures by punching holes in each shoe and passing a filament through the holes. The method was not ideal, however, because it left a permanent blemish on the shoes.

Maxwell is the owner of record and named inventor of United States Patent No. 4,624,060 ("'060 patent" or "Maxwell patent"). The patent claims a "system for connecting mated pairs of shoes to prevent separation and possible mismatching when offered for sale in self-service stores." Maxwell patent, abstract. Maxwell filed an application for a patent on October 6, 1983, and a patent was issued on November 25, 1986.

The '060 patent describes a system that threads a filament through loops or fastening tabs secured between the inner and outer soles of each shoe of a mated pair. Maxwell's shoe connection system securely joins shoes together without damaging them. The loops used to attach the shoes are not visible when the shoes are worn and do not irritate the wearer. In 1985, Maxwell granted Target Stores a non-exclusive license to use the attachment system on shoes purchased for resale. Once Target began using Maxwell's shoe connection system other discount retailers, including J. Baker, followed suit. J. Baker sells shoes through leased footwear departments in large discount retail stores. In 1990, Maxwell tried but failed to negotiate a license with J. Baker. J. Baker then developed and currently uses alternative shoe connection systems which secure the loop or fastening tab in a different location within the shoe.

Maxwell filed suit alleging that J. Baker and Prange Way, Inc. sold shoes using attachment systems that infringed the '060 patent. Defendants argued that they successfully designed around the '060 patent and asserted that their current shoe connection systems do not infringe Maxwell's patent. Defendants also asserted that Maxwell was not the original inventor of the claimed invention. A month long jury trial was held in October and November 1993.

At the close of evidence, defendants moved for judgment as a matter of law on all claims. The court granted the motion as to Prange Way, Inc. but declined to rule at that time as to J. Baker.

The case against J. Baker was submitted to the jury and, on November 10, 1993, a special verdict was returned in favor of Maxwell. The jury upheld the validity of the '060 patent. The jury found that all of the shoe connection systems used by J. Baker infringed the claims of the '060 patent. The jury also found that Maxwell complied with the marking statute, 35 U.S.C. § 287(a), in November 1987 and that she gave J. Baker actual notice of the infringement on June 14, 1990. The infringement by J. Baker after 1990 -- when it had actual notice of the patent -- was found to be willful. The jury determined that $.05 was a reasonable royalty rate per pair of shoes and that J. Baker had sold 31,000,000 shoes using the patented invention between November 1987 and August 1993. The jury also found that the damages suffered by Maxwell as a result of J. Baker's infringement exceeded the five cent royalty and awarded additional compensatory damages of $1,500,000. Finally, the jury rejected J. Baker's laches defense and found that it was not materially prejudiced by delay on the part of Maxwell in bringing suit.

Defendant J. Baker moves for judgment under Rule 50(b) asserting the court erred in not holding as a matter of law that the '060 patent was invalid based on prior inventorship and that the shoe connection systems used by J. Baker since 1990 do not infringe the '060 patent either literally or by equivalency. J. Baker also contends that the jury's finding of willfulness is not supported by clear and convincing evidence. J. Baker argues that the marking date fixed by the jury is not supported by substantial evidence and that there is no evidence to support the award of $1,500,000 in excess of the reasonable royalty awarded. J. Baker challenges the evidentiary basis for the royalty rate set by the jury as well as for damages associated with particular types of shoes. J. Baker also asserts that the doctrine of laches bars Maxwell's recovery of damages before J. Baker had actual notice of the infringement on June 14, 1990.

The '060 patent describes a pair of shoes, "each of which has a fastening tab firmly secured thereto and with a hole at one end or

with a loop formed by doubling of the tab, and a filamentary fastening element extending through the holes or loops of each of the fastening tabs, the ends of the filamentary element being joined together in a closed loop." Maxwell patent, col. 1, lines 49-55. The fastener tab is "secured by means of strong adhesive, stitching, staples, or all three, to the bottom sole of the shoe and the inner sole applied on top of the adhered portion of the fastening tab." Maxwell patent, abstract.

The '060 patent asserts two independent claims, claims 1 and 3.[1] Maxwell's claims of infringement focused on claim 3, which embodies the following limitations:

> 3. A system for attaching together mated pairs of shoes, which comprises in combination:
>
> (A) A pair of shoes, each of which has an inner sole and an outer sole, said inner sole having a side edge, each shoe also having a shoe upper with an inside surface and a top edge, each of said shoes further having a fastening tab and means for securing said tab between said inner and outer soles,
>
> (1) said fastening tab being an integral sheet with two parts,
>
> (2) the first of said parts extending horizontally between the outer sole and the inner sole of the shoe and being firmly secured thereto with said securing means,
>
> (3) the second of said parts comprising the opposite end of the tab

[1] Claim 2 is dependent upon claim 1; claim 4 of the patent depends upon claim 3.

extending from the first of said parts at the side edge of the inner sole upwardly along the inside surface of the shoe upper and extending so that said opposite end remains beneath the top edge of said shoe upper,

(4) the second of said parts having an aperture adjacent to its outermost end

(B) a fastening element extending through the apertures of each of said fastening tabs, the ends of the element being joined together in a closed loop;

whereby said pair of shoes is attached together by said fastening element passing through the aperture in each of said tabs so that on removal of said fastening element, said shoes separate and said tabs are not visible outside said shoe uppers.

Maxwell patent, col. 4, lines 15-44.

Claim 1 contains essentially the same limitations as to location as claim 3, but describes the use of a tab folded over to form a loop as an aperture instead of a tab with a hole at one end. Maxwell patent, col. 3, lines 22-47 and col. 4, lines 1-9. Claim 1 describes the first part of the fastening tab as "one end of the elongated tab extending horizontally between the inside surfaces of the outer sole and inner sole of the shoe and firmly secured thereto with said securing means." Maxwell patent, col. 3, lines 33-37. The opposite end of the "elongated tab" extends "from one edge of the inner sole and vertically upward along but spaced from the inside surface of the shoe upper and extending so that said opposite end remains beneath the top edge of said shoe upper." Id. at lines 39-44. The second part of the tab has an

aperture "in the form of a loop formed by doubling the fastening tab over on itself." Id. at lines 45-47.

The accused devices are several types of shoe connection systems used by J. Baker. The jury found that each shoe connection system infringed the '060 patent. From 1985 to 1990, J. Baker ordered pairs of shoes connected together with a filament passed through loops "under the sock." In response, vendors provided shoes with loops secured between the inner and outer soles as well as shoes with loops secured between the sock lining and the inner sole. In 1990, J. Baker adopted alternative shoe connection systems which secure the loop or fastening tab in a different location within the shoe.

For shoes that do not have a suitable aperture but do have a counter pocket, J. Baker uses a shoe connecting system in which a loop or fastening tab is sewn to the counter pocket of the shoe. A counter pocket is a stiff structure that provides support for the heel of the shoe and extends vertically on the inside of the shoe upper to the top line in a semicircle around the heel area. One end of the tab is stitched under the vertical seam of the counter pocket lining at a point midway between the insole and the top line near the rear of the shoe upper. The other end of the tab extends horizontally toward the front of the shoe and forms a loop. The loops are connected by a filament and are not visible outside the shoes when the shoes are worn.

J. Baker employs a slightly different shoe connection system for shoes that have neither an aperture or counter pocket. The loops are attached inside the shoe upper at the top line of the shoes. The loops are connected by a filament threaded through the loops. The top line system may be used for lined or for unlined shoes. The loops are generally not visible outside the shoes when worn. The same system is used in boots except that the loop is secured two inches below the top line on the vertical seam.

DISCUSSION

J. Baker as a proponent of a motion for judgment as a matter of law confronts a difficult standard. To succeed on its motion, J. Baker must show (1) that the jury's findings are not supported

by substantial evidence or (2) that the facts properly found cannot support the jury's verdict. Mentor Corp. v. Coloplast, Inc., 998 F.2d 992, 994 (Fed. Cir. 1993). A finding is supported by substantial evidence if a reasonable juror could have made that finding upon considering the record as a whole. Wang Lab., Inc. v. Toshiba Corp., 993 F.2d 858, 863 (Fed. Cir. 1993). The court views the evidence in the light most favorable to Maxwell, assumes that the jury resolved all conflicts in favor of Maxwell, assumes as true all facts which Maxwell's evidence tended to prove and gives Maxwell all favorable inferences which may reasonably be drawn from proved facts. Dana Corp. v. IPC Ltd. Partnership, 860 F.2d 415, 417 (Fed. Cir. 1988). It is irrelevant that the evidence could also support a contrary verdict, when a reasonable jury could have reached the verdict that was reached in this case. The court is not free to set aside a verdict merely because it would have ruled differently, or believes that the jury should have drawn different inferences and conclusions. Rather, the jury's verdict must be upheld if supported by substantial evidence.

1. Patent Validity

In reviewing a verdict concerning patent validity, the court presumes the jury made the proper findings to support its verdict. Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 619 (Fed. Cir. 1985). The burden of proving patent invalidity by clear and convincing evidence rests on J. Baker. J. Baker offered testimony which suggested that the shoe connection system claimed in the patent may have been invented by another. Maxwell presented evidence to the contrary. The jury expressly confirmed the validity of the '060 patent. The court concludes that there was substantial evidence to support the jury's finding that invalidity based on prior inventorship had not been proved by J. Baker.

2. Infringement

Maxwell's claims of infringement were submitted to the jury under two theories, literal infringement and infringement under the doctrine of equivalents. The jury found that all of the shoe connection systems used by J. Baker infringed the claims at issue. It is not possible to determine from the interrogatories, however,

whether the jury found literal infringement or infringement by equivalency. Accordingly, the court considers both theories to determine if the jury's verdict is sustainable.

A. Literal Infringement

Literal infringement requires that every limitation of a patent claim be found in the alleged infringing product. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1054 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988). For literal infringement to exist, the properly interpreted claims of the '060 patent must describe the accused device. Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 934-35 (Fed. Cir. 1987) (en banc), cert. denied, 485 U.S. 961 (1988). A literal infringement analysis involves two steps: interpretation of the patent's claims and comparing the accused devices to the claims as interpreted.

Claim interpretation remains a question of law to be decided by the court on a motion for judgment as a matter of law. Senmed, Inc. v. Richard-Allan Medical Indus. Inc., 888 F.2d 815, 818 (Fed. Cir. 1989).[2] To determine the intended meaning of a claim, the court looks to the claim language in context of the specification, the prior art and the prosecution history. SRI Int'l v. Matsushita Elec. Corp. of America, 775 F.2d 1107, 1118 (Fed. Cir. 1985) (en banc). Terms in a claim are to be given their ordinary and accustomed meaning unless it appears the inventor used them differently. Intellicall, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1387 (Fed. Cir. 1992).

Presuming the jury found literal infringement, J. Baker contends that such a finding was necessarily made in relation to a claim interpretation that cannot be sustained. Maxwell argued the term "fastening tab" as used in the patent claims does not merely designate a tab separate from the shoe but also encompasses shoe parts. The evidence at trial focused on the element in claim 3 that requires, a part of the "fastening tab" extend "horizontally between the outer sole and the inner sole of the shoe and [be]

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[2] See Read Corp. v. Portec, Inc., 970 F.2d 816, 822-23 (Fed. Cir. 1992) ("Where the court's interpretation [of the claims] is not set forth in its instructions to the jury, the court must perform its role of deciding this issue in ruling on the [judgment as a matter of law] motion.") (citation and footnote omitted).

firmly secured thereto" and the element in claim 1 that requires the first part of the "fastening tab" extend "horizontally between the inside surfaces of the outer sole and inner sole of the shoe and [be] firmly secured thereto."

Maxwell's patent expert, Malcolm Moore, opined that the loop and the counter pocket or lining together perform like the "tab" described in the patent claims. Relying on the reference in the claims to the fastening tab as an "integral sheet," Moore stated that the counter pocket and shoe lining are properly considered part of the fastening tab. Moore opined that the loop, combined with the portion of the counter pocket or upper lining which is stitched to the loop and extends between the soles of the shoes, provides a "tab" within the literal meaning of claims 1 and 3. Because the counter pocket or lining to which the loop is attached extend horizontally to the bottom of the shoe and are secured between the inner and outer soles, Moore concluded that the accused systems include "fastening tabs" secured where claims 1 and 3 literally require.

The claim language, specification and prosecution history all belie Maxwell's claim interpretation. Maxwell's interpretation differs from the ordinary meaning of "tab."[3] The fastening tab, both as described in the claims and depicted in the drawings, is an item separate from the counter pocket, the lining or the upper of the shoe. There is nothing in the patent language to indicate that the term "tab" is used in an uncommon way. Nor does the patent language indicate that "fastening tab" includes other shoe parts.

The specification of the '060 patent does not indicate that Maxwell intended the term "tab" to have another meaning. In fact, the opposite is true. The statement in the specification that the patented system "comprises in combination a pair of shoes, each of which has a fastening tab firmly secured thereto" indicates

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[3] The dictionary may be consulted to establish the "ordinary" meaning of a disputed term. Hoganas AB v. Dresser Indus., Inc., 9 F.3d 948, 951 & n.8 (Fed. Cir. 1993). See Webster's II New Riverside University Dictionary (1984) (defining "tab" as "a projection, flap, or short strip attached to an object to facilitate opening, handling or identification."); Random House Dictionary of the English Language (1969) (defining "tab" as "a small flap, strap, loop, or similar appendage, as on a garment, used for pulling, hanging, decoration, etc.").

that the tab is a separate item and does not encompass shoe parts. Maxwell patent, col. 1, lines 49-50. The specification also states that "[e]ach fastening tab is formed from elongated narrow strong sheet material, such as synthetic resinous plastic material and each fastening tab has two parts." Id. col. 1, lines 55-58.

The specification notes that, "[although shown as rectangular, the tab may obviously have rounded ends or may be in the form of an elongated oval, or the like." Id. col. 3, lines 10-12. Moreover, the statement that the second part of the tab "extends upwardly along the inside surface of the upper body of the shoe, but spaced therefrom," demonstrates that the tab is an item different from the lining or upper. Id. col. 1, lines 64-66. The statement that "the tabs may be stitched into a lining seam of the shoes at the sides or back of the shoes," also indicates that neither the lining, the upper nor the counter pocket are part of the fastening tab itself. Id. col. 2, lines 41-43.[4]

The use of the term "tab" in the prosecution history also undermines Maxwell's interpretation. See Maxwell's Amendment under Rule 111 filed February 4, 1985 ("Claim 1 requires a tab on the inside of the shoe upper as opposed to [an] outside tab"); Id. ("once the fastening element is cut from the shoes, there is no disfiguring remainder. The shoes are ready to be worn. The tabs simply rest along the inside surface of the shoe upper."); Maxwell's Amendment under Rule 111 filed May 8, 1985 ("the present invention as defined by claim 1 wherein the ends of a piece of material are held under the insole and a loop projects upwardly along the interior sidewall of the shoe.").

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[4] See also Maxwell patent, col. 1, lines 59 & 62-63 ("one end of the elongated tab ... the opposite end of the elongated tab"); Id. col. 1., line 68 and col. 2, line 1 ("loops caused by doubling the tabs"); Id. col. 2, lines 21-26 ("At the time of manufacture, each shoe is provided with a fastening tab ... [the tab] is thin flat and elongated formed from strong sheet material, such as plastic impregnated cloth, polyester film such as Mylar, or similar strong material which is resistant to tearing."); Id. col. 3, lines 5-7 ("typically the fastening tab may be between about 1/4 to 3/4 inch in width and 1 1/2 to 3 inches in length"); Id. col. 3, lines 8-10 ("Approximately one-half of the length of the tab should be secured between the inner and outer soles."); Id. abstract ("The tab comprises a length of narrow strong sheet material having a hole or loop at one end for receiving a fastening filament.").

If Maxwell wished or intended to use the term "tab" in some particular way other than that understood by one of ordinary skill in the art at the time the patent application was filed, she must have defined it in the patent prior to issuance. This she did not do. Nothing in the patent or the specification would have put one of ordinary skill in the art on notice that the term "tab" meant other than what it says. Thus, the term "tab" must be given its ordinary meaning. Accordingly, other parts of the shoe -- including the counter pocket, the shoe upper, the upper lining and the sock lining -- cannot be considered part of the "fastening tab" described in the '060 patent.

Maxwell's argument that the counter pocket and top line systems literally infringed the '060 patent turned on her claim interpretation. Having rejected Maxwell's interpretation, the court also concludes that the claims as properly construed are not literally infringed by the counter pocket and top line systems and that no reasonable jury could so find. The patent claims require that a part of the "fastening tab" extend horizontally between the inner and outer soles of the shoe and be firmly secured thereto. The tabs in the counter pocket and top line systems are secured in a different location within the shoe. There is no literal infringement as the tabs in those systems are not secured between the inner and outer soles of the shoe as required by claims 1 and 3 properly construed.

There is substantial evidence to support a finding of literal infringement based on J. Baker's use of a shoe connection system identical to the one described in the patent. Between 1985 and 1990, J. Baker ordered pairs of shoes connected together with a filament passed through loops "under the sock." The evidence, taken in favor of Maxwell, showed that in response the vendors provided J. Baker shoes with loops secured between the inner and outer soles rather than with loops secured between the sock lining and the inner sole. The court concludes that a reasonable jury could find that the "under the sock" system in practice was identical to the patented system. Accordingly, the jury's finding of literal infringement based on shoe connection systems used by J. Baker, other than the counter pocket and top line systems, is supported by substantial evidence.

B. Infringement under the Doctrine of Equivalents

There is no reason to conclude that the jury arrived at Maxwell's claim interpretation. The jury's verdict is readily understood as pertaining to infringement by equivalency which does not require adoption of Maxwell's claim interpretation. The doctrine of equivalents recognizes that a patented invention may be infringed not only by a device precisely described in a patent claim, but also by a device that falls outside the literal claims but is substantially the same thing, used in substantially the same way, to achieve substantially the same result. Graver Tank & Mfg. Co. v. Linde AirProds. Co., 339 U.S. 605 (1950).

The question is not whether the accused systems are equivalent to the patented invention. Rather, the proper focus is whether the accused systems contain an equivalent to the tab in the patented system which is secured between the inner and outer soles of the shoes. Maxwell has the burden of showing that the required limitation was met equivalently in each of the accused systems. A "substantial equivalent" of a limitation is one that fails to "substantially change the way in which the function of the claimed invention is performed." Perkin-Elmer Corp. v. Westinghouse Elec. Corp., 822 F.2d 1528, 1533 (Fed. Cir. 1987). There was no dispute concerning the function or result prongs of the test. J. Baker conceded that the accused systems perform substantially the same function and achieve the same result as the patented shoe connection system. That is, the accused systems connect mated pairs of shoes together in a secure manner without damaging the appearance of the shoes. The contested issue was whether the accused systems perform that function and achieve that result in substantially the same way as the patented system.

The doctrine of equivalents is based on substantial, not exact, identity of ways. The way devices work is a question of fact, as is the question of whether the ways are equivalent. The significance of the similarities and differences between the way the accused and patented systems work presented a factual issue for the jury. The substantially the same way test may be met if an equivalent of a recited limitation has been substituted in the accused device. Malta v. Schulmerich Carillons, Inc., 952 F.2d 1320, 1325-26 (Fed. Cir. 1991). The tabs in the accused systems are secured on

the inside of the shoe upper and remain beneath the top edge of the upper after the filament is cut. The jury found that the accused systems perform the same function as the patented invention in substantially the same way. The jury's factual finding of infringement under the doctrine of equivalents must be sustained unless J. Baker demonstrates that no reasonable juror could have reached such a result.

Maxwell presented expert testimony comparing the claims of the '060 patent to the accused devices. The jury heard evidence that varying the placement of the tabs in the accused systems did not change the way those systems worked as compared to the patented invention. Moore opined that stitching the loop to the shoe lining, upper or counter pocket, which are secured between the inner and outer soles, was an insubstantial change from the invention claimed in the patent. J. Baker attempted to show that the way the accused shoe connection systems obtain the result differed substantially from Maxwell's patented system. The jury, however, chose to accept the evidence supporting equivalency and infringement.

The court must sustain the jury's verdict if there is any reasonable basis for it. Considering all the inferences in favor of Maxwell, the evidence established that the accused systems are merely an insubstantially altered form of the invention set forth in the patent claims. Although the accused systems technically escape the claim language, the jury could have reasonably found that each system contains an equivalent for the claim limitation that is not met literally. There is also substantial evidence to support the jury's implicit determination that the tabs in the accused systems, although placed at the side or back of the shoe uppers, operate in a mode similar, if not identical, to the patented system. In sum, a reasonable jury could have found that there are no substantial differences in how the shoe connection systems work. The court concludes that the jury's finding of infringement by equivalency is supported by substantial evidence.

It is well established that equivalency is a question of fact for the jury. See Sun Studs, Inc. v. ATA Equip. Leasing, Inc., 872 F.2d 978, 986 (Fed. Cir. 1989) (equivalency of claim limitations and accused structure and infringement are question of facts),

overruled on other grounds, A.C. Aukerman Co. v. R.L. Chaides Const. Co., 960 F.2d 1020, 1032 (Fed. Cir. 1992); Pennwalt, 833 F.2d at 936 (same). J. Baker insists that because the doctrine of equivalents is designed to do equity, infringement under the doctrine is a question for the court not a factual determination within the province of the jury.[5] The court views its role differently. When considering the doctrine of equivalents, the court performs its traditional function as a gate keeper. That is, the court must first be satisfied that the facts in a particular case justify application of the doctrine before allowing the jury to consider infringement by equivalency. Once the court determines that the threshold has been met, as it did here, the issues of equivalency and infringement are for the jury to decide.

J. Baker argues here, as it did to the jury, that infringement by equivalency cannot lie because it successfully "designed around" the system claimed in Maxwell's patent. Although designing or inventing around patents to make new inventions is encouraged, piracy is not. London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1538 (Fed. Cir. 1991) (citing Graver Tank, 339 U.S. at 609-10). Thus, where an infringer merely makes an insubstantial change, essentially misappropriating the patented invention, infringement by equivalence may lie. The evidence, taken in favor of Maxwell, established that J. Baker deliberately adopted only minimal changes while maintaining the same function as the patented system. At the time J. Baker devised the accused systems it knew of the '060 patent and had been charged with infringement. Although J. Baker maintained that it had carefully designed around the patent claims, the jury heard evidence that the decision to move the loops to the counter pocket and top line was reached in a matter of moments without examining the patent language or consulting counsel.[6] The court concludes that a reasonable jury

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[5] The court notes that the respective roles of the court and jury in applying the doctrine of equivalents is currently being contemplated by the Federal Circuit. Hilton Davis Chemical Co. v. Warner-Jenkinson Co., Inc., No. 93-1088 (Fed. Cir.) (en banc).

[6] Richard Volpe was charged with deciding where to place the loops in the alternative shoe connection systems. The jury heard the following testimony regarding the placement of the loops in the counter pocket and top line systems:

could find that J. Baker had no intent to innovate, made no attempt to design around the patent and impermissibly copied and misappropriated the essence of the patented invention.

J. Baker also argues that infringement under the doctrine of equivalents is precluded because the range of equivalents that includes its shoe attachment systems also covers the prior art

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Q: In what way were you involved with that implementation effort?

A: I basically made the decision to put it in the counter pocket and on the top line.

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Q: How did you come up with that idea?

A: I just thought of it. It wasn't too difficult. You could put it in a lot of different ways.

Q: And when did you come up with that idea?

A: As soon as I heard that we were going to be -- that we should stop using this, so I came up with that. It took me about five minutes.

Q: Before the time you came up with the idea of putting the loop into the counter, had you seen Sue Maxwell's patent?

A: I didn't know whether or not she had a patent.

Q: You didn't even know that a patent existed at that point?

A: I had no idea.

Q: What was your understanding as to why you were looking for a different place for the loop?

A: There might be a potential problem with that particular procedure, so I tried to use another procedure.

disclosed in the Ornsteen, Nelson and Moore patents.[7] Maxwell cannot, of course, use the doctrine of equivalents to extend the right to exclude others so broadly as to ensnare devices within the public domain. Wilson Sporting Goods Co. v. David Geoffrey & Assocs., 904 F.2d 677, 683-84 (Fed. Cir. 1990). There was considerable testimony concerning whether the range of equivalents asserted by Maxwell encompassed structures already in the prior art. Maxwell's patent expert distinguished the prior art disclosed in the patents relied on by J. Baker. Maxwell also offered evidence that the novelty or importance of her system was the concept of a tab inside a shoe which includes an aperture through which a filament may be passed to attach a mated pair together and which neither disfigures the shoes when the filament has been cut nor results in discomfort to the wearer.

J. Baker's argument relies heavily on the Nelson patent.[8] J. Baker contends that the Nelson system is identical to the top line system in that a tab is sewn into the inside surface of the footwear for the purpose of connecting mated pairs. The Nelson patent describes a long flexible strip permanently attached to the upper inner side of an overshoe or other foot covering. The free end of the strip has means such as buckles or buttons for attaching

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[7] The Ornsteen patent (No. 3,482,335) describes a shoe connection system which uses elongated tabs to join mated pairs of shoes displayed at discount retail stores. One end of each tab is attached to the outside of the shoe, either between the sole and the shoe upper, between the heel and the shoe upper or on the bottom of the shoe. The opposite end of each tab is equipped with a snap fastener. The Nelson patent (No. 1,300,998) discloses a fastening means to prevent separation of rubbers, overshoes or other foot coverings. A long flexible strip is permanently attached to the upper interior side of each rubber. The free ends of the strips have fastening means, consisting of a button and button-hole, a hook and an eye or a buckle, which can be engaged and detached. The Moore patent (No. 1,189,989) describes an attachment for overshoes which allows the wearer to pull the overshoe over the heel of a shoe or boot. A horseshoe shaped loop is permanently attached to the center of the overshoe between the lining and the sole. The wearer places the toe of the shoe or boot into the overshoe and grasps the loop to pull the overshoe over the heel. The loop lies within the overshoe under the boot or shoe.

[8] The court notes that Maxwell did not need to distinguish the device described in the Nelson patent during the prosecution history.

a pair of overshoes together. In contrast to the accused systems, the Nelson system does not include a filament extending between the tabs. In addition, the strip in the Nelson system does not lay comfortably alongside the inner wall of the footwear. Moore testified that the differences between the Nelson system and the accused systems are great enough to afford Maxwell's patent a range of equivalents which covers the accused systems without also encompassing the Nelson prior art.

J. Baker focuses on its own evidence while disregarding the evidence which supports a finding of equivalency. The evidence, supporting the jury's finding, however, is substantial. After being instructed that the '060 patent claims could not be extended by equivalents to cover devices in the prior art, the jury found that the range of equivalents included the accused systems but did not encompass devices disclosed by the prior art. The court holds that a reasonable jury could find infringement by equivalency between the patented invention and the accused systems used by J. Baker without treading on the prior art.

Finally, J. Baker contends that Maxwell is estopped from asserting coverage of the accused systems. J. Baker argues that the prosecution history of the '060 patent limits the invention to a range of equivalents insufficient to encompass the accused systems. Prosecution history estoppel bars a patentee from enforcing its claims against equivalent structures if those structures were excluded by claim limitations added in order to avoid the prior art. Wang Lab., Inc. v. Toshiba Corp., 993 F.2d 858, 866 (Fed. Cir. 1993). Prosecution history estoppel may also be based on arguments submitted by the patentee to obtain a patent. Hughes Aircraft Co. v. United States, 717 F.2d 1351, 1362 (Fed. Cir. 1983). J. Baker asserts that varying the location of the tab cannot be regarded as an insubstantial change because Maxwell stressed the importance of the location of the tab in her shoe connection system to differentiate the prior art and obtain her patent. Maxwell responds that she did not give up the right to assert that her patent covered by equivalents the counter docket and top line systems.

The patent examiner initially rejected claims 1 and 2 as obvious in light of the Ornsteen patent. In response, Maxwell

stated that the claimed invention "requires a tab on the inside of the shoe upper as opposed to the outside tab of Ornsteen." Maxwell explained that locating the tab inside the shoe is important as the tab in the Ornsteen system must be cut from a shoe before it would be usable and, even after removal, part of the tab would remain visible outside the shoe. In the claimed invention, however, once the fastening element is cut there is no disfiguring remainder and the shoes are ready to be worn. The tabs simply rest inside the shoe beneath the top edge of the shoe upper. Thus, it was the location of the tab inside the shoe upper that was relied upon by Maxwell to distinguish the Ornsteen prior art.

Upon reconsideration, the patent examiner allowed claims 1 and 2 but rejected claims 3 and 4 as unpatentable over Ornsteen in light of the Moore patent. The patent examiner stated that "Moore teaches the use of fastening tab means mounted between an inside surface of an outer sole and inner sole of a shoe and extending outwardly inside the shoe and remains below the top edge of the shoe upper." In rejecting the claims, the patent examiner suggested that the tab of Ornsteen could be used in the manner taught by Moore. Maxwell relied on the placement of the tab along the side of the shoe upper as opposed to the center of the insole to distinguish the Moore prior art. Maxwell explained that "the method of Moore is unacceptable since lumps cannot be avoided at the location of the slots where the tab goes between the inner sole and a lower sole." Maxwell also stated that "the tab of Ornsteen being substituted for the loop of Moore would result in the same problem." In addition, Maxwell noted that the tab of Moore must be cut from the shoes before they could be worn.

The essence of prosecution history estoppel is that a patentee should not be able to obtain, through litigation, coverage of subject matter relinquished during prosecution. In determining whether prosecution history applies because of a change in the claim language during prosecution, "the court must consider not only what was changed, but the reason for such change." Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A., 944 F.2d 870, 882 (Fed. Cir. 1991) (citation omitted). Maxwell emphasized that part of the novelty of her invention was the

placement of the tab inside the shoe along the side of the shoe upper. The tabs in the accused systems are also located inside the shoe along the side of the shoe upper.

The doctrine of prosecution history estoppel was described to the jury and the jury was specifically told that Maxwell could not recapture what she had yielded in order to obtain the patent. The jury found that Maxwell was not estopped from asserting her patent covers by equivalents the counter pocket and top line systems. The court holds that the jury's finding is supported by substantial evidence and comports with the doctrine of prosecution history estoppel. Accordingly, there is no basis to disturb the jury's verdict of infringement under the doctrine of equivalents.

3. Willful Infringement

The jury found that J. Baker's infringement after 1990 was willful. Willful infringement is determined from the totality of the circumstances and must be proven by clear and convincing evidence. Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1580 (Fed. Cir. 1986). In finding J. Baker's infringement was willful, the jury was required to find that J. Baker acted in disregard of the '060 patent and lacked a reasonable basis for believing it had a right to act as it did. American Medical Sys., Inc. v. Medical Eng'g Corp., 6 F.3d 1523, 1530 (Fed. Cir. 1993). The existence of willful infringement is a finding of fact which must be sustained unless J. Baker demonstrates that no reasonable juror could have reached such a result. Id.

The court rejects J. Baker's argument that the jury's finding of willfulness is ambiguous. J. Baker contends that the jury's finding of willfulness may be based on its use of some shoe connection systems and not others. The court disagrees. The jury found that although the shoe connection systems used by J. Baker between 1986 and 1990 infringed the '060 patent, such infringement was not willful. The jury also found that Maxwell gave J. Baker actual notice of the infringement on June 14, 1990, and that J. Baker's infringement after 1990 was willful. The commencement of J. Baker's willful infringement corresponds with its actual notice of the infringement. The jury's finding of

willfulness is properly interpreted as turning on J. Baker's actual notice rather than on the particular type of shoe connection system employed.

J. Baker argues, as it did to the jury, that it did not knowingly copy Maxwell's patented invention. J. Baker maintains that it carefully designed the counter pocket and top line systems to avoid infringing the '060 patent and that it believed in good faith that those systems did not infringe the patent claims. J. Baker offered scant evidence of good faith efforts to design around the claims of the '060 patent. In fact, as noted above, J. Baker's contentions were belied by evidence that it made a snap decision to move the location of the loops without even examining the patent language. It was well within the jury's province to find that J. Baker intentionally disregarded Maxwell's patent rights by deliberately copying the idea and design of her patented invention. The court also holds that a reasonable jury could have deemed the evidence sufficient to establish J. Baker's complete disregard of Maxwell's patent rights.

Moreover, there was no evidence that J. Baker consulted counsel on the question of infringement before adopting the counter pocket and top line systems. While the failure to seek the opinion of counsel does not compel a finding of willfulness, it is a factor which the jury could reasonably rely upon in considering whether J. Baker's infringement was willful. "It is well settled that a potential infringer having actual notice of another's patent rights has an affirmative duty of due care. That affirmative duty will normally entail the obtaining of competent legal advice before engaging in any potentially infringing activity or continuing such activity." Amsted Indus., Inc. v. Buckeye Steel Castings Co., 24 F.3d 178, 181 (Fed. Cir. 1994) (quotation omitted). J. Baker relied on its assertions and presented no probative evidence of a good faith belief in non-infringement. The jury rejected J. Baker's argument that it had exercised due care and accepted the evidence indicating that J. Baker proceeded without a reasonable basis for believing it had a right to act as it did. The court holds that the combination of facts before the jury provided substantial support for its finding of willful infringement by clear and convincing evidence.

4. Compliance with the Marking Statute

J. Baker maintains that the November 1987 marking date fixed by the jury is not supported by substantial evidence. Maxwell is entitled to damages from the time when she either began marking the patented fasteners in compliance with 35 U.S.C. § 287(a) or when she actually notified J. Baker of its infringement, whichever is earlier. American Medical Sys., 6 F.3d at 1537. If there is a delay between issuance of the patent and compliance with the marking statute, as there was here, the marking once begun "must be substantially consistent and continuous in order for the [patentee] to avail itself of the constructive notice provisions of the statute." Id. J. Baker argues that more than a de minimis number of shoes were sold by Target without the requisite marking and, consequently, that Maxwell's damages should be limited to the period after J. Baker had actual notice of the infringement.

Before the patent issued, Target agreed to properly mark patent pending on all shoes and boots attached with the fasteners. The ticketing instructions to Target's vendors were amended to include directions on proper marking. The '060 patent was issued on November 25, 1986. In December 1986, Maxwell notified Target to mark the patent number on all shoes attached with the patented fasteners as required by the license agreement. On May 3, 1987, Maxwell confirmed that Target was completing the effort to change over marking from patent pending to the patent number by October 1987 for shoes and November 1987 for boots. Long before October 1987, vendors were notified by Target and Maxwell of the need to make these changes. There was testimony that Target used its best efforts to ensure that shoes connected with a loop system were marked with the patent number. There also was evidence that Target's compliance with the marking requirement was greater than 95 percent.

The jury was charged with determining when, if ever, Maxwell, or Target Stores as her licensee, was in full compliance with the marking statute. In accordance with the decision of the Federal Circuit in American Medical Systems, the jury was instructed that:

> Maxwell may give constructive notice of her patent by marking the patent number on substantially all shoes sold with the patented fasteners under her authority. Substantially all means that all but a few of the patented articles sold by Maxwell or her licensee were marked with the patent number.

Jury Inst. No. 43. The jury was told that Maxwell had the burden of proving the date on which she or Target as her licensee was in compliance with the marking statute. The jury was also instructed:

> To comply with the marking statute, Maxwell or Target must mark substantially all the shoes with the patent number. A delay between the issuance of the patent and compliance with the statutory marking requirement does not prevent recovery of damages after the date that Maxwell or Target began marking the patented articles in compliance with the statute as long as the marking was consistent and continuous.
>
> Marking alone is not sufficient to satisfy the marking statute if unmarked products were sold or distributed after marking began. If you should find that Maxwell or Target marked some articles but continued to sell or ship unmarked articles, you should determine the date when Maxwell or Target consistently marked substantially all of the patented articles and unmarked products were no longer being distributed by Maxwell or Target. The number of articles seen by defendants does not control the issue of marking. Rather, you should focus on whether Maxwell or Target performed the statutory duty of giving notice by marking the patented articles and distributing only marked products.

Jury Inst. No. 44. The jury found that Maxwell was in compliance with the marking statute as of November 1987.

In attacking the marking date found by the jury, J. Baker contends that the jury failed to account for the time period which would be required for Target to sell off unmarked inventory. There was evidence that Target completed the effort to change over marking from patent pending to the patent number by October 1987 for shoes and November 1987 for boots. Vendors who sold shoes to Target were notified months before October 1987 of the need to make these changes in marking. J. Baker concedes that there is evidence to support the finding that substantially all shoes received by Target in or after October 1987 were marked with the patent number. J. Baker argues, however, that it would have taken Target between 6 and 12 months to sell inventory received before October 1987. This argument ignores the evidence which supports the marking date set by the jury. The jury heard evidence that it would take less than two months for Target to sell its inventory. Eight or nine months elapsed between the initial notice sent from Maxwell to Target and the November 1987 marking date. A reasonable jury could have found that Target had ample time to sell its unmarked inventory before November 1987 and after that date distributed only shoes and boots marked with the patent number.

J. Baker also focuses on floor buy shoes or shoes purchased from dealers stock. Such footwear is imported by vendors or other third parties for potential sale to Target and other retailers. Joy Shaffer, a shoe buyer for Target, testified that the number of shoes purchased from dealer stock was not more than 10 percent. Her testimony apparently included all footwear and was not limited to shoes and boots attached with the patented loop system. Shaffer testified that Target purchased dealer stock shoes from vendors who had been instructed to mark the loops on such shoes with the patent number. She also stated that Target expected the vendors to comply with the marking instructions. Shaffer said that Target preferred to buy marked shoes from dealer stock but admitted that if push came to shove she would buy shoes from a vendor even if they were not marked with the patent number. Based on Shaffer's testimony, J. Baker speculates that a significant number of dealer stock shoes purchased by Target were not marked. Considering all the inferences in favor of

Maxwell, a reasonable jury could have found that substantially all the dealer stock shoes purchased by Target after November 1987 were marked with the patent number. The court concludes that the marking date fixed by the jury is supported by substantial evidence and, therefore, must be sustained.

5. Damages

When a patent owner's right to exclude others from making, using, or selling the claimed invention is infringed, the patent owner is authorized to obtain compensation in the form of damages. 35 U.S.C. § 284. The statute requires that the amount awarded be sufficient to compensate Maxwell for her loss due to J. Baker's infringement and, in any event, may not be less than a reasonable royalty. Id.[9] Maxwell did not seek damages based on lost profits but sought to recover damages measured by a reasonable royalty for J. Baker's unauthorized use of the patented invention.

The jury was charged with determining the monetary amount which would fairly compensate Maxwell for the actual damages caused by J. Baker's infringement. The jury was instructed that:

> The owner of a patent is entitled to an award of damages "adequate to compensate for the infringement but in no event less than a reasonable royalty for the use made of the invention by the infringer." A reasonable royalty as a measure of recovery is intended to provide just recovery to the owner of an infringed patent. If you should find that Maxwell has sustained damages, the minimum amount of monetary damages that you may award is a reasonable royalty.

To determine a reasonable royalty rate, the jury was told to decide what Maxwell and J. Baker, as a willing licensor and willing

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[9] Title 35 U.S.C. § 284 provides in part:

> Upon finding for the claimant [patent owner] the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

licensee, would have agreed upon during hypothetical negotiations. The court also reminded the jury that Maxwell could not recover a sum greater than the actual monetary loss suffered because of J. Baker's infringement.

The jury determined that $.05 was a reasonable royalty rate per pair of shoes and that J. Baker had sold 31,000,000 shoes using the patented invention between November 1987 and August 1993. The jury found that the damages suffered by Maxwell as a result of J. Baker's infringement exceeded the reasonable royalty and awarded additional compensatory damages of $1,500,000.[10] J. Baker argues that there is no evidence to support the award of damages in addition to the royalty awarded. J. Baker also challenges the evidentiary basis for the royalty rate set by the jury as well as for damages associated with particular types of shoes.

A. Royalty Rate

J. Baker insists that its offer of one cent per pair of shoes and Maxwell's counteroffer of three cents per pair establish the parameters of a reasonable royalty. One who chooses not to accept a license that is offered, however, may not later rely on the license royalty rate as the measure of damages. See, e.g., Beatrice Foods Co. v. New England Printing & Lithographing Co., 899 F.2d 1171, 1173 (Fed. Cir. 1990). J. Baker chose not to accept the license offered to it by Maxwell. J. Baker may not rely on that offer now to curtail Maxwell's recovery.

J. Baker contends that the jury's award of a royalty rate of five cents per pair of shoes is unduly speculative. The court disagrees. The jury considered various royalty rates -- one cent, three cents and six cents -- discussed during unsuccessful prior negotiations

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[10] The jury provided the following answers in response to interrogatories in the special verdict form:

10. If you find that J. Baker infringed the Maxwell patent, was Maxwell damaged in excess of the amount of a reasonable royalty as a result of the infringement?

A: Yes.

11. What amount of money will compensate Maxwell for additional damages, if any, she sustained as a result of the infringement?

A: $1,500,000.

between the parties. The jury heard evidence that Maxwell had licensed her patented system to Elan-Polo, a vendor, for ten cents per pair of shoes. Maxwell provided expert testimony that a reasonable royalty rate as to J. Baker would be ten cents per pair.[11] The jury had before it "such relevant evidence from the record taken as a whole as might be accepted by a reasonable mind as adequate to support the finding under review." Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 893 (Fed. Cir. 1984). Thus, the jury's assessment of a royalty rate of five cents per pair of shoes is supported by substantial evidence.

B. Additional Compensatory Damages

Damages cannot be recovered, of course, unless there is evidence to establish a basis for such recovery. J. Baker asserts, and the court agrees, that there is no basis for Maxwell to recover lost profits. Maxwell is not entitled to recoup lost profits as such damages are recoverable only where the infringing activity directly competes with the patent owner's sales. State Indus., Inc. v. Mor-Flo Indus., Inc., 883 F.2d 1573, 1577 (Fed. Cir. 1989), cert. denied, 493 U.S. 1022 (1990). The court cannot agree, however, that the amount of additional damages resulted from speculation and conjecture on the part of the jury. Indeed, the damage instruction specifically cautioned against such reasoning. Considering all the inferences in favor of Maxwell, the court concludes that the compensatory damages awarded by the jury are supported by substantial evidence and are not excessive.

The measure of damages for patent infringement is the amount which will compensate the patent owner for pecuniary loss sustained because of infringement. State Indus., 883 F.2d at 1577. The floor for a damage award is no less than a reasonable royalty. Damages greater than a reasonable royalty may be awarded where necessary to adequately compensate the patent owner for the infringement. If it were otherwise, "the infringer would have nothing to lose, and everything to gain if he could count on paying only the normal, routine royalty non-infringers might have paid.

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[11] There was also testimony that the price of the patented shoe connection system would be comparable to the price for lining and boxes which ranged from ten to fifty cents.

Stickle v. Heublein, Inc., 716 F.2d 1550, 1563 (Fed. Cir. 1983) (quoting Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152, 1158 (6th Cir. 1978)). Such an increase may be stated either as a reasonable royalty for an infringer or an increase in the reasonable royalty rate determined by the trier of fact. Id.

There was evidence that the rates Maxwell offered to J. Baker were artificially low due to ongoing infringement of her patent by J. Baker and others in the industry. Maxwell testified that the rates offered were not an accurate measure of her damages because widespread disregard of her patent forced her to offer licenses based on a diminished royalty. The jury apparently accepted that the rates were indeed artificially depressed. While the question may be a close one, the court concludes that a reasonable jury, based on the evidence here, could have found that the royalty rate of five cents did not fully compensate Maxwell for the damages she sustained as a result of J. Baker's infringement.

Maxwell is entitled to recover the amount, although it may be difficult to ascertain precisely, which compensates her for pecuniary damages she suffered because of J. Baker's infringement. As Maxwell notes, the jury could have plausibly understood the instructions as directing them to award as a reasonable royalty the minimum figure that two hypothetical, willing parties would agree upon. To adequately compensate Maxwell for her actual damages, however, the jury awarded additional compensatory damages to effectively increase the royalty as applied to the infringer here, J. Baker. The total compensatory award of $3.05 million is much less than the $7 million Maxwell sought and corresponds to a royalty rate as applied to J. Baker of slightly less than ten cents per pair of shoes. The court concludes that a royalty rate of nearly ten cents is supported by substantial evidence.

C. Other Challenges

J. Baker contends that Maxwell should not recover for shoes sold by J. Baker before 1990 because there is no evidence that any shoes incorporated a fabric loop under the insole as opposed to under the sock lining. J. Baker's argument erroneously presumes that the shoe connection systems it used before 1990 did not

infringe the '060 patent. As discussed above, there is substantial evidence to support a finding that J. Baker's "under the sock" system was identical in practice to the shoe connection system described in the '060 patent and, therefore, literally infringed the patent claims. Accordingly, Maxwell is entitled to recover for damages she sustained as a result of the infringement.

J. Baker also asserts that Maxwell cannot recover damages for boots because she failed to establish the quantity of boots for which the fabric loop extended above the top of the boot upper. A reasonable jury could have found that the system used by J. Baker to connect mated pairs of boots infringed the '060 patent. J. Baker's own purchase orders for boots using loop connection systems directed that the loops be inserted two inches below the top line. The jury could reasonably find that loops inserted pursuant to those instructions would not extend above the top of the boot upper. There was no evidence that J. Baker sold any boots where the loops were connected at the top of the boot upper or extended above the top line of the boot.[12] The court concludes that there is substantial evidence to support the jury's finding that Maxwell is entitled to recover for damages she sustained as a result of infringing boots sold by J. Baker.

Finally, J. Baker contends that Maxwell should not recover damages for any shoes because she failed to prove what percentage of the shoes sold by J. Baker were lined as opposed to unlined. The evidence, taken in favor of Maxwell, was sufficient for a jury to find that J. Baker used the top line system on lined footwear. Moreover, there is no evidence that the jury included any pairs of unlined shoes in its damage calculations. J. Baker's speculative argument to the contrary does not provide a basis for disturbing the jury's award of damages.

J. Baker focuses on its own evidence while disregarding the evidence which supports the damages awarded by the jury. The court notes that Maxwell, as the patentee, need not prove infringement damages with absolute certainty, but need only

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[12] In support of its argument, J. Baker cites one pair of boots with loops connected near the top of the boot upper. The boots, however, were not sold by J. Baker.

provide a reasonable basis for estimating her losses. While J. Baker was not expected to maintain separate records before it had notice of infringement, it must bear any adverse consequences for uncertainty caused by its failure to keep accurate or complete records after being charged with infringement in 1990. Lam, Inc. v. Johns-Manville Corp., 718 F.2d 1056, 1065 (Fed. Cir. 1983). The jury could have reasonably found that J. Baker's conduct prevented Maxwell from accurately determining damages or made it more difficult for her to do so. Accordingly, it was within the jury's province to resolve all doubts against J. Baker and determine damages based on the best available evidence. Id. The court is satisfied that the jury's award of damages is based on products found to have actually infringed the '060 patent and is supported by substantial evidence.

6. Laches

J. Baker raises the affirmative defense of laches as a bar to recovery of damages for any infringing activity that occurred prior to Maxwell filing suit in December 1990. J. Baker accuses Maxwell of waiting too long to bring suit and argues that it was prejudiced by the delay. To prevail on a laches defense, J. Baker had the burden of proving that:

(1) Maxwell delayed filing suit for an unreasonable and inexcusable length of time after she knew or reasonably should have known of her cause of action against J. Baker; and

(2) J. Baker was materially prejudiced by the delay.

A.C. Aukerman Co. v. R.L. Chaides Const. Co., 960 F.2d 1020, 1032 (Fed. Cir. 1992). J. Baker asserts that Maxwell was aware of infringement by J. Baker and the rest of the industry for years but made no effort to notify potential infringers until April 20, 1990. Maxwell responds that J. Baker has established neither undue delay or material prejudice.

The question of laches was submitted to the jury on an advisory basis. The jury found that J. Baker was not materially prejudiced by any delay on the part of Maxwell in filing suit.

That finding is supported by substantial evidence. J. Baker urges the court to exercise its discretion and disregard the jury's finding concerning this equitable defense. After considering the evidence and arguments offered by both parties on this issue, the court, based on its independent knowledge of the circumstances in this case, also rejects the laches defense asserted by J. Baker.

In determining whether the defense of laches applies, the court takes into account all the particular facts and circumstances of the case and weighs the equities of the parties. Laches involves more than the passage of time. Delay in bringing suit is not sufficient for a finding of laches; rather, the delay must be unreasonable and unexcused. The length of time which may be deemed unreasonable has no fixed boundaries but rather depends on the circumstances. Aukerman, 960 F.2d at 1032. The period of delay is measured from the time Maxwell knew or reasonably should have known of J. Baker's alleged infringing activities to the date of suit. Reasons or justification offered by Maxwell must be considered in assessing whether the delay was undue.

Material prejudice to J. Baker resulting from Maxwell's silence or delay is essential to the laches defense. Evidentiary prejudice may occur where a defendant is unable to present a full and fair defense on the merits of the case, due to the loss of records, the death of a witness or the unreliability of memories of long past events. Id. Economic prejudice is a more difficult concept. Economic prejudice may consist of the loss of monetary investments or damages incurred which would have been prevented by earlier suit. Id. Such damages, however, cannot merely be those attributable to a finding of infringement. Rather, J. Baker must demonstrate that, during the period of inaction, it changed its economic position because of the delay. On the other hand, Maxwell cannot intentionally remain silent and allow her damages to rise, where J. Baker, if notice had been given, could have switched to a non-infringing product. Id.

J. Baker contends that Maxwell was aware, at the time her patent issued, of widespread use within the industry of a shoe connection which she believed to infringe her patent. Maxwell admitted she knew before the patent issued that people within the industry were copying her shoe connection system. Maxwell

notified vendors, including J. Baker's vendors, of the patent in 1987. She did not, however, directly notify retailers of her patent until three years later. The reasons offered by Maxwell for the delay included investigating the extent of infringement in the industry, lack of resources and the need to develop a mechanism for enforcing her patent.

On April 20, 1990, Maxwell sent a copy of the '060 patent along with a letter to nearly 200 discount retailers, including J. Baker. The letter inquired whether the retailer used or contemplated using the shoe connection system claimed in the patent. The letter stated that Maxwell was the owner of the patented system and invited discussions concerning licensing arrangements. J. Baker responded to the letter and engaged in settlement discussions with Maxwell. The negotiations broke down in September 1990.

The court finds that the evidence does not support J. Baker's laches defense. Although Maxwell failed to immediately file suit, the evidence does not establish that the delay of slightly more than three years was unreasonable. Maxwell filed suit in December 1990 well within the six year statute of limitations. The court also finds that the reasons offered by Maxwell excused any delay. While Maxwell suspected that retailers in the industry were pirating her invention, the court is not convinced that Maxwell intentionally remained silent and allowed her damages to escalate.

The evidence also fails to show that J. Baker would have switched to a non-infringing product had earlier notice been given. Once notified of the patent by Maxwell, J. Baker made a quick decision to move the location of the loops without examining the patent language or consulting counsel. The jury found that the shoe connection systems adopted by J. Baker in 1990 infringed the '060 patent and that the infringement was willful. There is no reason to believe that J. Baker would have acted differently had earlier notice been provided.

J. Baker contends that it suffered evidentiary prejudice due to Maxwell's delay in filing suit. J. Baker argues that it was denied the opportunity to keep separate records for potentially infringing products and that the passage of time impaired its ability to

quantify the extent of its infringement. J. Baker has not shown any relationship between its activities and Maxwell's inaction. J. Baker did not establish separate records once it was aware of Maxwell's patent and was charged with infringement. From all that appears, J. Baker's would have maintained the same records regardless of what Maxwell did or did not do. J. Baker also argues that the delay prevented it from gathering evidence relevant to the issue of marking. The court is unpersuaded, however, that J. Baker has suffered material prejudice as a result of Maxwell's delay in bringing suit. The losses incurred by J. Baker during that period are attributable to its liability for infringement. Accordingly, the court finds that J. Baker has not demonstrated any economic prejudice suffered as a result of Maxwell's delay.

CONCLUSION

J. Baker attempts to retry this case under the guise of a motion for judgment as a matter of law. After reviewing all of the evidence in the light most favorable to Maxwell and giving her the benefit of all favorable inferences, the court concludes that substantial evidence supports the jury's verdict. Based on the foregoing, **IT IS HEREBY ORDERED** that defendant J. Baker's motion for judgment as a matter of law under Fed. R. Civ. P. 50 is denied.

Dated: February 22, 1995

David S. Doty, Judge
United States District Court

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA
FOURTH DIVISION

Susan M. Maxwell, Civil No. 4-90-941

Plaintiff,

v. **ORDER**

J. Baker, Inc., and
Prange Way, Inc.,

Defendants.

Earl D. Reiland, Esq., Daniel W. McDonald, Esq., Alan G. Gorman, Esq., and Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A., 3100 Norwest Center, 90 South Seventh Street, Minneapolis, MN 55402, counsel for Susan Maxwell.

James J. Foster, Esq., Philip G. Koenig, Esq., Douglas R. Wolf, Esq. and Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210, and Bruce H. Little, Popham, Haik, Schnobrich & Kaufman, Ltd., 3300 Piper Jaffray Tower, 222 South Ninth Street, Minneapolis, MN 55402, counsel for J. Baker, Inc.

Based on the jury verdict returned in her favor, plaintiff Susan M. Maxwell ("Maxwell") moves for entry of judgment and award of treble damages, attorney fees and prejudgment interest. In exercising its discretion on these matters, the court brings to bear its familiarity with the case and the competing policies of the patent laws being enforced. Based on a review of the file, record

and proceedings herein, and for the reasons stated below, the court grants Maxwell's motion.

BACKGROUND

Maxwell is the owner of record and named inventor of United States Patent No. 4,624,060 ("'060 patent"). On November 10, 1993, after a month long trial, a jury verdict upholding the '060 patent and finding infringement was returned. The jury found that J. Baker used and continues to use shoe connection systems which infringe the patent and that the infringement by J. Baker after 1990 -- when it had actual notice of the patent -- was willful. To compensate Maxwell for infringement the jury awarded approximately $3 million in damages. By separate order, the court has upheld the jury's finding of willful infringement and denied J. Baker's motions for judgment as a matter of law and a new trial.[1]

1. Prejudgment Interest

Upon a finding of patent infringement, 35 U.S.C. § 284 directs the court to add interest and costs to the damages award to afford complete compensation to the patentee. Prejudgment interest should be awarded absent some justification for withholding such an award. General Motors Corp. v. Devex Corp., 461 U.S. 648, 657 (1983). Asserting that Maxwell delayed unduly in bringing suit, J. Baker urges the court not to award prejudgment interest for the three years and five months prior to April 1990. Withholding prejudgment interest based on delay, however, is the exception, not the rule. Lummus Indus., Inc. v. D.M. & E. Corp., 862 F.2d 267, 275 (Fed. Cir. 1988). The court has already rejected

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[1] The commencement of J. Baker's willful infringement corresponds with its actual notice of the infringement. The jury found that although the shoe connection systems used by J. Baker between 1986 and 1990 infringed the '060 patent, such infringement was not willful. The jury also found that Maxwell gave J. Baker actual notice of the infringement on June 14, 1990, and that J. Baker's infringement after 1990 was willful. J. Baker argued that the jury's finding of willfulness may be based on its use of some shoe connection systems and not others. The court has held, however, that the jury's finding of willful infringement is properly interpreted as turning on J. Baker's actual notice rather than on the particular type of shoe connection system employed.

J. Baker's laches defense. In doing so, the court found that J. Baker was not materially prejudiced as a result of Maxwell's delay in bringing suit. In the absence of prejudice to J. Baker any delay by Maxwell does not warrant a denial of prejudgment interest. Id. Accordingly, the general rule that prejudgment interest should be awarded applies and Maxwell is entitled to prejudgment interest from November 1987 to the date of judgment. The prejudgment interest applies only to the compensatory award of $3.05 million, not to any increased damages awarded by the court.

Both parties agree that the interest should be compounded annually. The parties disagree, however, as to the appropriate rate of interest. Maxwell claims that the rate should correspond to a composite of the annual corporate bond rate for J. Baker.[2] Such a rate, according to Maxwell, ensures that J. Baker does not obtain an undue benefit. J. Baker responds that Maxwell's approach ignores the compensatory nature of prejudgment interest. J. Baker urges the court to apply the 52 week Treasury bill rate which is the rate Maxwell could have earned had she invested the money. Neither party points to any part of the factual record that requires or justifies one rate over the other. The court declines to adopt either rate proposed by the parties. The purpose of awarding prejudgment interest is to compensate Maxwell for the time value of money and the court has discretion to determine which rate of interest will best accomplish that purpose in this case. The court finds that an award of prejudgment interest at the prime rate compounded annually will adequately compensate Maxwell for the loss of the use of her money over time.

The parties also disagree on how the damage award should be allocated over the period of infringement. Maxwell estimates that between 1988 and 1991 J. Baker sold 5 million pairs of infringing shoes per year. For 1992 and 1993, Maxwell assumes that J. Baker's infringing sales increased to an annual rate of 6.6 million based on evidence of higher sales in those two years.

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[2] The average rates for J. Baker as calculated by Maxwell are 9.56% in 1988 and 1989, 10.87% in 1990, 10.16% in 1991, 9.53% in 1992 and 6.75% in 1993.

J. Baker contends that the allocation of damages should correspond to the sales figures Maxwell used at trial. The amount of infringing sales found by the jury corresponds to roughly 45 percent of the sales asserted by Maxwell. J. Baker argues that an appropriate allocation is achieved by taking 45 percent of Maxwell's sales figures between November 1987 and August 1993. Maxwell responds that J. Baker crafted its approach to lower the amount of prejudgment interest by shifting more sales to recent years. Maxwell contends that her approach is more balanced and adequately reflects J. Baker's increasing sales during recent years. While any attempt to reconstruct the jury's damage calculation is speculative, the court finds that J. Baker's method of allocating damages is a more reasonable interpretation of the jury's finding concerning the amount of infringing sales. Accordingly, prejudgment interest and any increased damages shall be awarded on this basis.

2. Enhancement of Damages

Maxwell seeks treble damages pursuant to 35 U.S.C. § 284, which provides that a trial court "may increase the damages up to three times the amount found or assessed." An award of enhanced damages is committed to the discretion of the district court. A finding of willfulness justifies an award of treble damages but does not mandate that damages be increased. In determining whether to enhance damages, the court considers the egregiousness of the defendant's conduct based on all the facts and circumstances. Read Corp. v. Portec, Inc., 970 F.2d 816, 826 (Fed. Cir. 1992).

The Federal Circuit has identified three primary factors for determining when an "infringer acted in [such] bad faith as to merit an increase in damages awarded him." Bott v. Four Star Corp., 807 F.2d 1567, 1572 (Fed. Cir. 1986). Those factors are: (1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good faith belief that it was invalid or that it was not infringed; and (3) the infringer's behavior as a party to the litigation. Id. The Bott factors are not exclusive. Read, 970 F.2d at 827. The court may also consider secondary circumstances including

defendant's size and financial condition, the closeness of the case, the duration of defendant's misconduct, any remedial action by the defendant, defendant's motivation for harm and whether defendant attempted to conceal its misconduct. Id. The court also takes into account the punitive nature of enhanced damages and the goal of deterring infringement.

J. Baker insists that increased damages are not warranted because it did not knowingly copy Maxwell's patented system. The evidence before the court, however, indicates that J. Baker deliberately copied the idea and design of Maxwell's patented invention. J. Baker did not investigate the scope of the patent. Rather, when faced with imminent litigation for patent infringement, J. Baker simply made a snap decision to move the location of the loops without even examining the language of the '060 patent. This is not a case, as J. Baker would have the court believe, where a defendant made a misjudgment in determining whether the patented device was "designed around" enough to avoid infringement. J. Baker asserts that it carefully designed the counter pocket and top line systems to avoid infringing the '060 patent and that it believed in good faith that those systems did not infringe the patent claims. Although it argued the issue vigorously, J. Baker has offered scant evidence of good faith efforts to design around the claims of the '060 patent.

Evidence of a good faith belief in non-infringement is also lacking. J. Baker did not consult counsel on the questions of patent infringement or validity before adopting the counter pocket and top line systems.[3] The court recognizes that the failure to seek the advice of counsel compels neither a finding of willfulness nor enhanced damages. The combination of facts and circumstances present here, however, convince the court that J. Baker did not exercise the requisite degree of due care or make any serious attempt to design around the '060 patent. To the

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[3] "It is well settled that a potential infringer having actual notice of another's patent rights has an affirmative duty of due care. That affirmative duty will normally entail the obtaining of competent legal advice before engaging in any potentially infringing activity or continuing such activity." Amsted Indus., Inc. v. Buckeye Steel Castings Co., 24 F.3d 178, 181 (Fed. Cir. 1994) (quotation omitted).

contrary, J. Baker blatantly dismissed the patent and proceeded without a good faith belief that the patent was invalid or not infringed.

Other considerations also support an award of increased damages. J. Baker is one of the nation's largest independent operator of licensed shoe departments. Maxwell, an individual, has survived years of hotly contested litigation against J. Baker that threatened to drain her financial resources. The record suggests that J. Baker knew Maxwell would have difficulty funding a long, expensive lawsuit. The undertaking was made more formidable by the common defense group formed by J. Baker and other large companies within the shoe industry, all of whom have refused to license the patented system. J. Baker has not ceased using the infringing systems or taken any other remedial action. J. Baker has continued to infringe the '060 patent after express notice, after suit was filed and after the jury verdict finding willful infringement was returned. At no point during this case has J. Baker established separate records to distinguish infringing and noninfringing sales.

Based on the totality of the circumstances, including the jury's finding of willfulness, the court finds that enhancement of damages is warranted in this case. J. Baker should not be allowed to knowingly infringe a valid patent for almost five years and be punished only by paying a somewhat enhanced royalty. Maxwell suggests that the total damage award should be increased. However, because a finding of willful infringement is a prerequisite for increased damages, only those damages awarded to Maxwell after June 14, 1990, may be enhanced. Accordingly, the court trebles the compensatory damages awarded to Maxwell after June 14, 1990. The allocation of damages during this period shall conform to the approach the court has adopted for calculation of prejudgment interest. The court directs that any interim royalties which accrue to Maxwell as a result of J. Baker's continued infringement are also subject to trebling.

3. Attorney Fees

Under 35 U.S.C. § 285, the court may award attorney fees to the prevailing party in "exceptional cases." The decision whether or not to award attorney fees is committed to the discretion of the

court. Modine Mfg. Co. v. Allen Group, Inc., 917 F.2d 538, 543 (Fed. Cir. 1990). In support of her motion, Maxwell relies on the heavy weight of authority that a finding of willful infringement and "exceptional case" go hand in hand. Id. J. Baker responds that the case is not exceptional and that an award of fees is not warranted because the finding of infringement was only partial. Based on the totality of the circumstances, including the jury's finding of willfulness and the facts which support that finding, the court deems this case to be exceptional and holds that Maxwell is entitled to recover reasonable attorney fees.

4. Accounting of Infringing Sales

The jury's findings and award of damages are based on J. Baker's sales through August 5, 1993, the date of the most recent data available at the time of trial. Maxwell seeks an accounting to determine the amount of J. Baker's infringing sales between August 5, 1993, and the effective date of an injunction. J. Baker requests that an accounting be deferred until the liability issues are finally resolved. Maxwell fears that unless an immediate accounting is ordered J. Baker will not keep adequate records to distinguish infringing and noninfringing sales. Based on J. Baker's conduct to date Maxwell has reason for concern. J. Baker did not establish separate records after being charged with infringement in 1990. Nor is there any indication that J. Baker has established such records since the jury verdict was returned.

Although Maxwell is entitled to an accounting, the court declines to order one at this time. By separate order, however, the court has granted Maxwell injunctive relief and declined to stay the injunction pending appeal. The injunction shall become effective May 1, 1995. In the event that the injunction is stayed on appeal, the court directs J. Baker to immediately establish and implement a record keeping system which distinguishes between infringing and noninfringing sales. Within fourteen days of the stay, J. Baker shall submit a detailed affidavit to the court describing the record keeping procedure. Pending a final accounting, J. Baker shall provide Maxwell and the court with a summary of infringing sales on a quarterly basis. The court

believes that such an approach adequately addresses Maxwell's legitimate concerns.

CONCLUSION

Based on the foregoing and the verdict returned by the jury on November 10, 1993, **IT IS HEREBY ORDERED** that:

1. Judgment is entered against defendant J. Baker, Inc. and in favor of plaintiff Susan M. Maxwell on the claim of infringement of United States Patent No. 4,624,060.

2. Judgment is entered against defendant and in favor of plaintiff in the amount of $3,050,000 as compensatory damages for J. Baker's infringement of the '060 patent.

3. Based on the jury's finding that J. Baker's infringement after June 14, 1990, was willful, the damages awarded to Maxwell after that date, including any interim royalties, shall be trebled pursuant to 35 U.S.C. § 284.

4. J. Baker shall pay Maxwell prejudgment interest from November 1987 to the date of judgment. The prejudgment interest applies only to the award of $3,050,000, not to the increased damages, and shall be calculated as described above.

5. Maxwell shall recover reasonable attorney fees from J. Baker pursuant to 35 U.S.C. § 285.

6. The final calculation of damages, prejudgment interest and attorney fees is reserved by the court pending appeal and shall be calculated after a final accounting of infringing sales in this case.

LET JUDGMENT BE ENTERED ACCORDINGLY.

Dated: March 10, 1995

David S. Doty, Judge
United States District Court

United States Court of Appeals for the Federal Circuit

95-1292,-1293,-1355

SUSAN M. MAXWELL,

Plaintiff-Appellee,

v.

J. BAKER, INC.,

Defendant-Appellant,

and

PRANGE WAY, INC.,

Defendant.

ORDER

United States Court of Appeals for the Federal Circuit

ORDER

A suggestion for rehearing in banc having been filed by the APPELLEE, and a response thereto having been invited by the court and filed by the APPELLANT, and the matter having first been referred as a petition for rehearing to the panel that heard the appeal, and the suggestion for rehearing in banc and response was thereafter circulated to judges on the panel that heard the appeal and to the remaining active judges of the court, no judge having asked for a poll whether to rehear the appeal in banc,

UPON CONSIDERATION THEREOF, it is

ORDERED that the petition for rehearing be, and the same hereby is, DENIED and it is further

ORDERED that the suggestion for rehearing in banc be, and the same hereby is, DECLINED.

The mandate of the court will issue on September 4, 1996.

FOR THE COURT
FRANCIS X. GINDHART, CLERK

Dated: August 28, 1996

By_____
Brian P. LeDuc
Associate Chief Deputy Clerk

cc: HENRY D. DINGER
EARL D. REILAND

MAXWELL V J BAKER INC, 95-1292,-1293,-1355
(DCT - 4-90-941)

FILED
U.S. COURT OF APPEALS FOR
THE FEDERAL CIRCUIT
AUG. 28, 1996
FRANCIS X. GINDHART
CLERK

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* Note: Pursuant to Fed. Cir. R. 47.6, this order is not *

* citable as precedent. It is a public record. *

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UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

95-1292,-1293,-1355

SUSAN M. MAXWELL,

Plaintiff-Appellee,

v.

J. BAKER, INC.,

Defendant-Appellant,

and

PRANGE WAY, INC.

Defendant.

JUDGMENT

Appeal from a decision of the United States District Court for the District of Minnesota in 4-90-941 entered March 13, 1995, Judge David S. Doty.

This CAUSE having been heard and considered, it is

ORDERED AND ADJUDGED:

AFFIRMED-IN-PART, REVERSED-IN-PART, VACATED-IN-PART, AND REMANDED

ENTERED BY ORDER OF THE COURT

DATED: June 11, 1996

Francis X. Gindhart, Clerk

ISSUED AS A MANDATE: September 4, 1996

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

U.S. Const. Art. I, § 8, cl. 8 provides:

> To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries....

35 U.S.C. § 271 (1988) provides in pertinent part:

> a) Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefore, infringes the patent.
>
> * * * *

35 U.S.C. § 251 provides in pertinent part:

> No reissued patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent.

35 U.S.C. § 282 provides in pertinent part:

> A patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim....
>
> The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded:
>
> * * * *
>
> (2) Invalidity of the patent or any claim in suit on any ground specified in part II of this title as a condition for patentability ....

35 U.S.C. § 112 provides in pertinent part:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.
>
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
>
> * * * *